THE

FARMERS MAGAZINE.

(N°. IV.)

MONDAY, 20TH OCTOBER 1800.

(ORIGINAL COMMUNICATIONS.)

TO THE CONDUCTORS OF THE FARMERS MAGAZINE.

Letter concerning the Management of a late Crop of Oats.

GENTLEMEN,

INVITED by the introduction to your First Number, I beg leave to offer to your consideration some observations and experiments, made in the management of a late crop of oats, during the last unfavourable harvest, which may perhaps be of use to some of your readers under similar circumstances.

Having been induced to break up about 80 acres of a sheep pasture, in a pretty high situation, consisting of a light dry soil, upon a whin-stone gravel, that was very much overrun with fog, I had the whole of it ploughed last spring by the middle of February; but as none of it had ever been in tillage, I was afraid to risk a crop of early oats, and unfortunately determined to sow the whole with common oats, which I began to do during the last week of February. I had got a few bolls sown in very good order, and another break half harrowed, when a fall of snow, with a pretty severe frost, set in, which continued betwixt a fortnight and three weeks. Upon a change of weather, I found such part of the seed as had been covered with snow so far advanced in vegetation, that I allowed it to remain in that state, rather than disturb it with additional harrowing. The whole was completed early in April, and when the braird made its appearance, I was agreeably disappointed, to find no apparent difference on what had been exposed to the severity of the weather from

the other parts of the field; and this I mention as a proof that there is no danger, upon a dry soil, in sowing oats much earlier than is generally practised.

The cold barren spring gave the whole so unfavourable an appearance, that by the middle of June it scarcely covered the clod, and I despaired of ever reaping a crop; but during the month of July, which was the only favourable weather we experienced in 1799, the vegetation was so rapid, and the whole became so luxuriant, that I laid my account with at least six or eight bolls per acre. But when the rains in August set in, the whole field still continued to vegetate, and became so strong in the straw, that the greater part of the crop lodged, without coming to maturity. As the weather continued very unfavourable, I delayed cutting it till the middle of October, by which time it was so much *edge grown*, or full of after shoots, that it must soon have rotted on the ground, and I then determined to cut it, without any regard to the weather.

Such part of it as could be cut dry, was stooked in the ordinary manner, but the greatest part of it was *gated or set up in single sheaves*, a method which I take for granted is known to every farmer.

It continued a long time upon the ground, in hopes of more favourable weather, and people were constantly employed in setting up the stooks or gates as they were blown down; but from the dews or hoar frost during the long nights, and the little influence of the sun during the day, I found it was not getting any dryer, and resolved to have it off the ground at any rate. Such part of the crop as had been in stooks, was put into small stacks, with chimneys for a draught of air in the middle of them. The gates that were tolerably dry, were bound into sheaves and stacked in the same manner; part of them were also bound, and built in *rive ricks*, or small stacks about four feet diameter, and seven or eight feet high, with a single sheaf, with the head downwards, spread over the top of it. Such of the gates as were in the wettest state, were put up in the same manner, without being bound into sheaves, and the whole remained in this state till thrashed out during the winter.

When the crop came to be taken in, I found, that what had been put in stacks, either from stooks or gates, was very much heated, and part of it rotten upon the west side, which had been least exposed to the wind, although some of the stacks had been once or twice cast. The rive-ricks, built of the gates that had been bound, were not heated,

heated, but musty and moulded in the heart; but those that had been made of the loose or unbound gates, continued in the same, or were rather in a dryer state then when put up; and I am confident, that if the whole crop had been managed in this last manner, immediately or soon after being cut, a great deal of trouble and expence would have been saved, and a much less quantity of grain lost, by being so long and often tossed about in the field.

One great inconveniency attending these *rive-ricks*, is their being so liable to be blown over by the wind; and I am of opinion, that a preferable practice would be to ridge up a piece of dry ground with the plough, in a direction from south to north, in the form of a high turnip drill, and to place the gates upon it in rows, with their heads overloping one another, and as high as a man on each side standing upon the ground could easily build them, and then cover them with a row of sheaves sloping a little from the center to each end; and, to prevent them from being blown over, a few stakes or props may be placed at proper distances on each side of the rows, this I am persuaded is the best possible method of preserving a late crop in such a wet and unfavourable season as the last; but, not having made the experiment, I only state this as matter of opinion.

It may not be unsatisfactory to mention, that the straw produced from the above crop, although wet, and part of it much heated, had such a quantity of green corn in it, that it was eaten greedily by a stock of Highland cattle, and kept them in better condition than they usually are upon dry straw. The corn was so wet and light, that I considered it not worth grinding, I therefore converted a lime into a corn kiln, on which it was dryed, dighted, and then laid up for my work horses; and by which, without any other oats, they were kept in perfect good order, except a feed of the wet corn boiled, given them every night, a practice by which I am persuaded there would always be a considerable saving.

I am, &c.

A FARMER.

June 1800.

P. S. Since writing the above, part of the stubble of the field had been accidentally set on fire, and when burnt, I discovered a very considerable quantity of corn, equal at least to two seeds, scattered upon the ground, a proof how much had been lost by the above management.

TO THE CONDUCTORS OF THE FARMERS MAGAZINE.

On the present State and Management of Common Fields, and Waste Lands, in Yorkshire.

GENTLEMEN,

THE present state and management of these lands, are little favourable to an improved and liberal plan of cultivation. The open fields are held by so many owners, and in such small patches, scattered over an extensive tract, at great distances from each other, that their cultivation is rendered extremely troublesome and expensive; added to the insuperable obstacle to an improved rotation of crops, by the discordant humours of so many holders, who can scarcely ever be brought to agree with their neighbours, upon any uniform plan of management.

The waste or common lands in this county, are in a deplorable and most disgraceful state; management is a perfect nonentity here; nine parts in ten of them are covered with rushes, furze, fern, moss, &c.; and even where good herbage exists, it is for the real advantage of none, but the prey of all. Where there is a stint or limitation of pasture, according to the respective claims, the case is somewhat better; there are even a few solitary instances of tolerably useful common pastures, on which, with proper care, every improvement of the herbage might be made, short of cultivation by the plough.

Of the open fields, some on the drier or turnip soils, are cultivated in the regular course of, 1. Turnips, eaten on the ground by sheep. 2. Barley. 3. Clover, or beans. 4. Wheat. These instances of the good sense and good humour of the occupants, concurring so obviously for their own benefit, in a rational system of management of these fields, are very rare. Hence the good farmer, having the misfortune of holding lands so situated, has at times the mortification of finding his valuable crops of turnips, &c., liable to the depredations of cattle, from the supineness of those who will perhaps have a summer-fallow in the same field, and who, of course, do not feel themselves interested in repairing the fences for that year. Hence the motley stripes of turnips, fallow, beans, clover, wheat, barley, and oats, at once in the same field, garnished with a variety and profusion of field-flowers and noxious weeds, to the manifest injury of the whole

body of occupiers, while no mode exists of compelling the few refractory ones to an improved style of management and culture. In short, the condition of these fields is such, on some of the best turnip soils in the island, that no intelligent cultivator would give half the rent for them, that he would for the same land if enclosed, or managed under a different system. Every one is convinced of the necessity of some remedy, but whether it would be expedient to *compel* the enclosure of the fields, along with that of the commons, in all future enclosure-bills, the writer is not competent to decide.

There is in this county an instance or two, where the township containing four open fields of the same sort of soil, the rotations are regular, and of course exhibit a noble pattern of cultivation on an extensive scale; for in these instances, a most singular spirit of emulation is excited, which almost ensures complete management throughout the whole; as the mismanagement of a single land, never fails to call up the satire and sneer of the neighbours, at the expence of the poor slovenly holder. There is a much admired instance of this laudable method of cultivating open fields, with this so pleasing harmony of management, at *Wath upon Derne*, four miles north of Rotherham, which deserves a record to the credit of the place, and better grain is nowhere grown. At *Hatfield*, 7 miles east of Doncaster, may be seen the direct reverse of the picture, on a gravelly soil, equally well adapted to the turnip husbandry, and where even the turnip hoe appears almost unknown.

On the strong, or clay soils, the management of the fields is generally more uniform, perhaps of necessity; the barren or summer-fallow occurring every four years, renders unanimity indispensible even to the most stupid of the possessors. The most approved course of crops is, 1. Wheat, after fallow. 2. Beans, or clover. 3. Wheat. Many other, and perhaps worse rotations, obtain in different places; and as it frequently happens, that a farmer of 20 acres has them scattered about in 30 or 40 different and distant places; it may easily be conceived how troublesome and expensive their cultivation must be. The great utility, nay necessity, of enclosing these open tracts of land, must be obvious to every one, the least conversant in rural affairs: for, while they are in their present state, the open-field lands in this county, amounting to not less than a million of acres, as well as those throughout the island, are certainly much less productive than they would be under an improved mode of culture, ever consequent on an enclosure.

I do not here mean to exclude the exceptions which may be found; exceptions which, in some degree, really speak in favour of open fields when properly managed, as, in some such situations, grain of most excellent quality is raised. But, as the general state of them is very little adapted to good husbandry, and as they cannot have the necessary changes of grass, pasturage, &c., their present situation ought to be reprobated, and altered as soon as possible; no other mean occurs than a general enclosure for this salutary purpose; to this measure, no objection can be opposed in sound policy, and it is really astonishing it has not been resorted to long since.

The waste lands of this county, and indeed of the island at large, are in a state most disgraceful to its policy; they are positive nuisances to every improvement around them. Their surface is covered with such wretched trash, so much occupied by bog and marsh, and in fact with every thing but the useful, that the poor animals which are turned upon them to shift for themselves, become, for want of food, such depredators on the adjoining fields and enclosures, as no fence of common height and strength can oppose. The loss to the community, by this wretched mode of rearing a few starvelings of cattle and sheep, is incalculable; and that on the very ground, which by culture would support above double the number, besides abundant crops of grain, for which it would soon be in the very best and most fertile state.

The whole amount of these waste lands in Yorkshire, is calculated at 849,272 acres; of which about 500,000 are capable of cultivation, the remainder supposed to be incapable of any improvement except by planting. The above 500,000 acres, on a moderate calculation, might be made to produce at least 1,000,000 quarters of grain of the various sorts, at the same time with a much improved stock of cattle, sheep, and giving the best employment to numbers of hands, who are now compelled to resort to pestiferous manufactures, or to remain idle half their time. These commons are for the most part pastured by the cattle of the inhabitants *ad libitum*; some few are more regularly and moderately stocked, by what is called a stint or limitation to each landholder according to a certain rate: and, in these cases, the pasture is sometimes a tolerably good one, but they are so rare, that they can never form an argument against the necessity of the general improvement of the wastes, for even these stinted pastures are in a sad condition, compared with what they might be brought to by the plough.

Immense tracts of these lands are now lost, for want of draining, lands of the most valuable quality under that improvement. Large and valuable tracts might be gained from the sea, by embankments, &c., which are utterly neglected in the present state of things, to the very great loss, nay injury, of the community. All these circumstances strongly impel the consideration, that the leading interests of this country, could not better employ their attention, than by endeavouring by all possible means to bring these lands into a state of cultivation; especially at a time when the commonest necessaries of life, the growth and produce of the country, are nearly out of the reach of the middling and lower classes of the people. It is an awful consideration, and ought deeply to impress the minds of the rulers of any country, that while objects of comparatively trifling importance, perhaps remote or foreign interests, engage such anxious and expensive attention, the real interests of home may be neglected.

In regard to the history of this particular distribution of the territory of parishes, it may appear, by the peculiar mode of allocation, to have been introduced with the feudal system; three or four large fields of arable, and one tract of pasture or common, no doubt were the original domains of the lord of the manor, who had the labour on them performed for him by his vassals, who had afterwards different allotments or parcels of land, scattered over various parts of the lordship, granted, probably, for particular or eminent services, or in other ways alienated: as we see, in most unenclosed townships, a number of small enclosures, indeed much too small to be otherwise easily accounted for. Hence, there is reason to believe, that a considerable change in the management and occupation of land, was one effect of the feudal institutions, at the time our Norman conqueror forced them over the head of the much more excellent Saxon laws of our more remote ancestors: and we cannot but with pain observe, that greatly too much of the malignant spirit of those institutions remains, checking, if not blasting, the rising efforts of improvement, and, in a thousand instances, absolutely prohibiting the enclosure and superior cultivation of such open and wild districts. Yet, here, let us observe, that some open fields might not be much improved by enclosing, but, as such fields are in very particular circumstances, they are by no means to be considered but as the trifling exceptions generally occurring on general rules and observations.

Many difficulties would occur in respect to the enclosure of these fields and wastes; the interests and opinions, generally discordant, of the different claimants, the claims frequently unreasonable, of the lord of the manor, and tithe-holder, added to the certainty of an enormous expence of commissioners, solicitors, &c., have rendered, in some late instances, lands enclosed by act of parliament, as dear, as if actually purchased in fee simple. These present discouragements almost insuperable in the way of these most important improvements, in too many cases; so that it has actually become a problem, whether it would not be a measure of sound policy, for the government of any country so situated, to assume the power of alienating the waste lands as public property, for the real benefit of the public, and to sell them to such as might incline to become purchasers; reserving a preference in some way to the claimants; but whether or not so, is matter for discussion, as there is no doubt those who have lands adjoining, would purchase the contiguous lots, and the remainder would readily be sold by public auction. The respective claimants, by this mode, at the same time that they would render an essential service to the finances of their country, would also enclose and gain possession of their lands at a much cheaper rate than by the ordinary mode. The great difficulty at present is in the finding of the average value, and fair and impartial allocation, in due proportion to the value of claims, which is now scarcely ever satisfactorily done in any one instance; whereas, by the other mode of disposal, nothing further would be necessary, than simply to make sale of the lot next adjoining that last sold. Here, nobody would be wanted but a surveyor, and a jury of the neighbourhood to determine any question that might arise from particular circumstances. Thus might the barren wastes, now the opprobrium of our national agriculture, be converted into fruitful fields, the joy and glory of an enlightened and ameliorated cultivation.

W. P.

TO THE CONDUCTORS OF THE FARMERS MAGAZINE.

Strictures on Hedge-management.

GENTLEMEN,

In some late journeys through several English counties north of London, I have observed frequent and shameful neglect, in the state and management of the hedges in many places; I may almost say every where. Should the following cursory remarks on the subject merit insertion in your miscellany, they are offered as my mite to the treasury of husbandry, the most useful of the arts.

The first circumstance that strikes an observant stranger, accustomed to the regularity of modern inclosure, is, the great inequality in the sizes of fields, in the anciently inclosed districts of England, the crookedness of the hedges, and the strangely irregular shapes of the inclosures. But the object which I have particularly in view, in these strictures, and which merits the severest reprehension, is, that almost every where the hedges have been permitted to run wild, overspreading an irregular breadth of surface with a belt of useless and cumbrous brush-wood, while they scarcely half fence the fields, which they disfigure greatly, and the value of which they lesson very materially.

In very extensive, old and inclosed districts, I am fully convinced these crooked belts of brush-wood, improperly styled hedges, occupy a breadth of not less than eighteen or twenty feet, on every side of all the fields, one with another. Allowing considerably less than this supposition, as the waste of land beyond what ought to be occupied by a straight lined, and properly dressed hedge; and supposing the old inclosed fields to consist of ten acres each on the average, which I believe is rather above than below the truth, this loss of productive surface will amount to about half an acre in each field, or five acres in the hundred, upon the whole extent of such inclosed districts. When in pasture, these belts produce little or nothing to the cattle in the fields, besides tearing off a great deal of valuable wool from the sheep; and, when the fields are in hay, or under aration, they preclude the employment of the scythe and plough, from a much larger proportion of the land than has been stated above.

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The waste or loss produced by these hedges, is still farther and largely enhanced, by giving shelter to an immense number of small birds and other vermin, which destroy considerable quantities of the growing crops, especially when in corn. This species of loss cannot be appreciated: But as rents are always calculated upon some practically known, or estimated average produce, it must proportionably diminish the rents which the lands would otherwise yield to the proprietors.

In many places, the originally dividing hedges of two or more fields have been altogether neglected, allowing wide gaps to form in many places, so that cattle can pass freely through them: But these hedges are still allowed to remain, serving no other purpose than to occupy uselessly a considerable portion of ground, and add to the shelter for vermin of all kinds.

Every where, these old hedges seem to have been originally formed of a great variety of different kinds of plants, besides the white thorn, taken indiscriminately; many of which are very ill suited to the purpose. The consequence of this, and of neglect in training, has invariably been, to produce a great number of weak places and gaps, which are obliged to be perpetually mended up by various unsightly and expensive contrivances: Such as hurdles, pales, stake, and adder, and so on.

On an estate not fifty miles from London, which I had occasion to examine minutely last year, besides the evils already noticed, I found uniformly a good ridge breadth left uncultivated, next the hedges round every field under the plough. In this instance, and my information was that the practice was universal for many miles round, the loss of productive surface was not much less than ten per cent. of the whole in-field fertile land. On that estate, I observed one solitary instance, of having recently grubbed up a useless broad cross fence, which was then carrying a much heavier crop of hay than the best of the field. I had the satisfaction to convince the occupying proprietor of that estate, of the great waste of good land, by these cumbrous broad belts and uncultivated ridges; and have reason to believe, they are all now in course of being extirpated, and the ground cultivated.

I do not pretend to be a political arithmetician; but, from what I have observed, I cannot estimate the loss of valuable land, in consequence of the neglected state of old hedges in England, at less than an hundred thousand acres; besides the

the destruction produced by harbouring vermin, and the want of a free circulation of air. Were this loss only to fall upon the proprietors, to whose negligence it is owing, the injury would be immaterial: But, as every part of the general property which is improvidently wasted or neglected, is a real loss to the public; this object becomes worthy of serious reprehension. If my suppositions are well grounded, the public loses annually, through this circumstance, not less than the value of half a millon sterling; and the land thus left waste, might employ eight thousand families of labourers and artizans, giving employment and bread to forty or fifty thousand human beings.

STIVA.

Merse,
August 1800.

TO THE CONDUCTORS OF THE FARMERS MAGAZINE.

On the inequality of Weights and Measures.

GENTLEMEN,

I AM a country man, who cannot boast of much learning. An education at one of our parish schools, brought me the length of reading, writing, counting, and *Penna*. But though I was reckoned clever, and a great favourite of my master, who was in hopes of establishing his character, by the figure which my genius, brought to light by his ability, should make in the world, just as I was beginning to learn *Dominus*, I was taken from school by my father, who wanted such a lad to herd his cattle. This change was at first very agreeable to me. But two or three days soon made my time hang heavy, and I regretted my books and my playfellows. These, however, were in time forgotten; and my chief employment was, tending the cattle, or holding the plough, (to which my strength soon promoted me) and my chief delight consisted in reading the scriptures. In this way several years passed away, when my father's death made me heir both to his tack and stock.

Having now more money, and being sometimes obliged to go to market, I bought some books, which at leisure hours might gratify my favourite inclination. Some of these (the

Gentleman

Gentleman Farmer in particular) gave me a new light in my own profession. Consulting with some very sensible men, neighbours of mine, we set about trying a new method. The rotation of cropping which we have adopted is fourfold, viz. oats, turnips or potatoes, bear, hay We do not, however, keep more ground under tillage than is required to keep our stock through the winter. With our turnips we fatten some beasts for the butcher. This mode is now almost generally followed throughout this district, and answers so well, that, though situated in a rainy and high country, our harvest is generally finished before that of other places more favoured by nature.

In my dealings with different counties, and even with different parts of the same county, I have often been puzzled by the inequality of the weights and measures by which grain is sold. I cannot see any thing which prevents the Legislature to correct this abuse, by ordering the same standard to be used throughout the kingdom. But, on communicating these my sentiments to others more wise than myself, I am informed that it has already been in vain attempted. I acquiesced in this answer, as I always do in every opinion of my betters, where they are more able to judge than I can possibly be. For this evil I hope there is still a remedy left. You, Gentlemen, must know if there be any table of the proportions which the different bolls, bushels, &c. in use at different places bear to each other. If there is none which contains such useful information to the Farmer, I beg leave to suggest, whether it would not add much to the utility and circulation of your publication, (at least to such as myself it would be infinitely more valuable), if it contained a table such as I have mentioned. By comparing the size of the different measures used, we could obtain a much more accurate knowledge of the prices of grain, and of all the articles of common consumption at different places, as reported in your Magazine and the newspapers. Such a knowledge universally circulated would be attended with most beneficial effects. It would put the honest, but not so far travelled Farmer, on a footing with the knowing corn-dealer or sharp butcher. It must tend in a high degree to the extension of theoretical as well as practical knowledge of husbandry, and in these times of scarcity would have considerable influence on the equal reduction of all the commodities of life. Nor would the information requisite be very difficult to obtain. Your numerous correspondents and readers in different part

of the kingdom would contribute their aid, and I am persuaded that nothing is required but the formation of a proper plan, to have it quickly completed.

With these observations you are at liberty to make what use you please. I have only farther to say, if you can furnish us a table, it will be highly acceptable to your wellwishing

COUNTRYMAN.

TO THE CONDUCTORS OF THE FARMERS MAGAZINE.

New Galloway, 16th June 1800.

GENTLEMEN,

As it is believed a great deal of fruit was lost last year, from the persons who had it not knowing the best mode of preserving it, it might be doing a considerable service to the public, to insert in your next number an account of the best method of storing it up. As this must be a matter well known to those who are in the use of keeping great quantities, I presume you can easily furnish the necessary information.

It would be also obliging some of your correspondents to acquaint them where the best kind of dioptrical bee-hives are to be had.—I am,

GENTLEMEN,
Your most obedient,
A—— ——n.

Note by the Conductors.

It would have given us much pleasure to have furnished our correspondent with the information required; but the management of fruit is so little understood in this northern part of the island, that we must refer the query to our southern friends, who we trust will be kind enough to give a satisfactory answer.

N.

FOR THE FARMERS MAGAZINE.

An Essay on the proper Size of Farms.

THIS will best appear from observing the *effects* of the different classes of farms as at present existing, and which may be arranged under the following Heads.

I. Of Farms altogether under *Tillage.*
II. Of Farms altogether in *Pasture.*
III. Of Farms *partly in Tillage and partly in Pasture.*

HEAD I.

Of farms altogether under *tillage*, yet including as much pasture as may serve the milch-cows for the family use alone.

These may again be subdivided under the following classes.

1*st*, Of small farms in the occupation of *mechanics.*

2*d*, Of small farms in the occupation of *husbandmen* having no other profession.

3*d*, Of *two* or *more* farms contiguous, cultivated by *one* farmer.

4*th*, Of *several* farms *separated* from one another, but in one man's occupation. First, then,

Of small farms in the occupation of mechanics:

These are generally to be met with in the vicinity of towns or large villages; there are some examples of them also in the smaller villages scattered over the country, in which the wright, the smith, the webster, or the sutor, have their bit of land.

The husbandry of all these, without a single exception, is bad, the more inexcuseable when it happens to be in the immediate vicinity of a populous town, where, from market and manure, they ought to be in the best state; but, there is an inherent vice in this system, which no situation can counterbalance. For agriculture in such hands can never be more than a secondary object, or rather a bye-job altogether: but unhappily this is not all the mischief, for even their primary profession suffers in their unavoidable distraction of attention between the different occupations: and thus, from commencing their agricultural career, as bad husbandmen, they commonly

commonly dwindle down in the end to be sorry mechanics likewise.

It would, however, be wrong to prohibit this species of husbandry. Why should a man be hindered from giving vent to his folly in this line, as well as in any other? His time, to be sure, is very ill bestowed on such a speculation, but it would be worse *spent* in the *tavern*, the *turf*, or in the *cock-pit*; and, if there be any truth in the notion, that the *health* of such people is promoted by rural operations, it may compensate, in some degree, to the state, what it thus loses by their wretched cultivation.

There are, indeed, some examples of farms on a larger scale, that are occupied by *townsmen*, in which the cultivation is by no means bad. Some people, however, are ill-natured enough to remark, that the original profession declines in proportion as the farming advances; but the consideration of this is foreign to the present question.

2. Of *small* farms in the hands of *husbandmen having no other profession.*

By a farm of this description, I mean one of a *single ploughgate* of land, containing from 30 to 50 acres.

In this situation, the farmer cannot afford *to lie idle*, as it is termed; he must be a labourer himself, and is commonly the hardest wrought labourer on his farm. He is indeed the only able-bodied man about his *town*; his servants, consisting of a raw lad to assist him in the field operations, and a boy to take care of the cows. In winter he may have an old man supernumerary to assist him four or five months, to thresh out his crop; but at all seasons he receives much assistance from the female part of the family. The women are ever kept in full employment. They *redd* the barn to the old man;—they fork the dung, and spread it along with the lad;—they muck the byre, and fother the nolt with the boy;—they carry the seed corn to the *gudeman*, and in company with the *gudewife*,—they weed the lint and dress it; and, besides spinning and the daily operations of the *dairy*, and making of the *porridge* and *kale*, they have the occasional drudgery of the washings to perform too. Nothing, indeed, can exceed the industry of this part of the family, but the cheerfulness of their disposition and their unaffected simplicity of manners.

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With regard to the agriculture of this plodding class of farmers, it depends very much on the practice they have been educated in. No improvement almost was ever known to originate with them. They have even a reluctancy to adopt any that may be suggested to them. This does not arise, however, from any perversity of disposition or failure of intellect, but it is the natural consequence of their confined situation and scarcity of transactions. They cannot afford to mix with the world from curiosity, even their indispensible absence from home on account of business, is peculiarly inconvenient and expensive, as it lays the full half of their home-operations at a stand; while the little business they have to transact abroad is not full employment for the time.

There are, however, many examples of good cultivation in this class, (in well established modes of good cultivation they are indeed excelled by none) but it will always be found, that the most intelligent of them are those who have had, from some speciality in their circumstances, an unusual intercourse at an early period with society; or who, living in the vicinity of a great town, have hence acquired, at little expence, a knowledge of mankind, and of the principles of improvement, which, in a remote situation, in their limited sphere, they never could have attained.

Whenever our country is so completely cultivated that there will not remain a single improvement that can be made, either by enclosing, draining, watering, &c. or in cattle, implements, or rotation, then may it be laid out into such small farms, and consigned into the hands of these little tenants, who will be able, perhaps, without any great loss, to retain the soil in fertility. Such an arrangement may be even necessary from a regard to the morals of the people; as from the dissipation which will naturally accompany such a state of prosperity, there would be no class of men so apt, from their circumstances, to retain the simplicity of manners and laborious industry of ancient times. Even at the present day, they may be placed in the vicinity of great towns, where the land is already for the most part in an improved state, as their habits of industry and temperance would for some time prove a barrier against the spread of the enervated licentiousness of city-depravity; though it might still be necessary, from time to time, to renew the race from more remote parts, in proportion as the present possessors become contaminated with the vices of a more luxurious life. This change of tenantry would be of advantage were it mutual between the parties; for

for, if those who have been living for a series of years in the neighbourhood of a great town, were removed to a more remote situation, their more intelligent ideas in their profession, would operate to the more rapid melioration of the less improved lands on which they might chuse to settle, while they would lose the habit of dissipation from being less in the way of temptation to indulgence.

At present the produce brought to market from small farms, is always less in proportion than from farms of a larger size, because a greater proportion of it is consumed at home by the more proportionably numerous stock of unproductive cattle; an inherent evil in little farms, which no genius in the occupier can obviate; and, in general, there is even less produced on the ground, from the circumstances before stated with regard to the abilities of the husbandman himself. With regard to the effect of small farms on population, that will best appear from the next subdivision.

3. Of two or more farms lying *contiguous*, occupied by *one* farmer; being the general means by which *great* farms have originally been formed.

Though this system of letting lands has ever been a grievous subject of lamentation with half-witted politicians; it has, nevertheless, in practice, been found to be the most beneficial to the country, and still continues to add to the general prosperity.

When two or more farms are conjoined, the following effects arise: 1. The *expence of labour is reduced*, in so far as the peculiarities in the soil, in one, are contrasted by those in another farm; so that when the land is not in a condition of being laboured in one, it may with propriety be laboured in another; as in the example of one of the farms being of a dry soil, and the other of a wet, and which is commonly a conducing reason for the conjunction. Even where the soil is all of the same nature, there arises an advantage in the labouring of a great farm, from the concentering of the strength of men and horses at any particular operation, by which it is got finished in proper ease, with less risk of being spoiled from the uncertainty of weather, &c. 2. The *expence of housekeeping* is reduced, in proportion as there are fewer families of farmers to maintain. 3. The farmer, having more business, is more abroad in the world, is conversant in a higher line of life, and thus, having more opportunities of information,

he, in fact, becomes better informed; and as he has, 4. The *profits* of a *greater quantity* of ground in his hands, he is thence more able to introduce an improvement in practice or in stock, from another quarter, or better enabled to propose it himself from his own observation and experience.

The real produce of the lands becomes thus augmented, and as there is less of it consumed at home (there being fewer men and horses to maintain) a still greater proportion goes to market.

The *population* on the land is also augmented For, although it be true, that the common operations of the farm are conducted by fewer hands, yet there is always some extra work going forward in the various operations of improvment; such as in hedging, ditching, levelling, draining, building, &c. which the little farmer never would have thought of, or never have performed. The great farmer also excels the little tenant in a circumstance, which more than any thing else conduces to the population of the country; which is, that the *greater part of his servants are married and have families of their own*; and this he chuses, not from any affectation of patriotism, but from a principle of more effective influence—a regard to his own interest; as he finds that a numerous household of unmarried servants are very unmanageable, and that he is better served with sober married hinds, who board in their own houses, at less expence, and more to their satisfaction as well as his own.

The following state, in regard to this point, of a farm in the the vicinity of Edinburgh, consisting of about 280 Scotch acres, and which, prior to 1736, was in three farms of two ploughgates each, and which has since been united into one, shews this in a more explicit manner.

1735.		1793.	
Families of farmers	3	Family of the farmer	1
Ditto of cottagers	6	Families of cottagers	14
Total, families,	9	Total, families,	15
Horses	33	Horses,	16

At this period, the encrease from the married servants, was not sufficient to keep up the number of unmarried servants, who, of course, were obtained partly from the neighbouring

At the present period, the encrease from the married servants, does much more than supply the population necessary: their sons and daughters are therefore sent to

1735.	1793.
bouring villages; being sons of weavers, taylors, &c, Rent about 230l.	to supply the neighbouring towns, or to *the smaller farms in the neighbourhood, which cannot supply themselves!* There are also, at this time, 4 young men from this farm at sea. Rent, 636l.

As to the question, *How large ought a farm to be?* I can perceive no bounds in point of propriety, except those which nature has set to the genius of the farmer, and Providence to his fortune; for the larger that the farm be, if the tenant has capital, and abilities answerable, the better it will be in every respect to the community; as not only more produce is brought to market, but actually more is produced, from the superior advantages the great farmer enjoys, of being more able to make improvements, because more wealthy, but also better inclined to do so, from being more intelligent; we even see that the population of a country thus occupied, is augmented, from the circumstance of his interest being concerned, in giving the preference to married servants, instead of lads and boys, and superannuated men, with which the small farms are peopled. That he does not employ the whole progeny of these hinds, is a favourable circumstance to the public, as they serve as an excellent nursery for the supply of the mechanical branches, which not only cannot be recruited from a country laid out in small farms, but are themselves drained of their youth, to keep up the population of that unproductive system. *

Instead, therefore, of enquiring what ought to be the size of a farm, an assize ought to be held on the judgment of the farmer, and the capital he is able to command; for, although it may be remarked, that the powers of the mind, even in the same person, expand and contract according to the situation in which he may for some time be placed, yet there can be no doubt also, that there are people whose ge-

* It is curious to observe the cant of declamation, (for depopulating the country) which has for these last 40 years been kept up against the uniting of the small farms, which has taken place chiefly in that period, which has not only been an æra of great agricultural improvement, but the population, from actual investigation, has encreased in Scotland, near 300,000 souls, or about one fifth of the whole.

nius far surpasses the general run, in whatever circumstances they may be placed. Thus, while it would require a man of considerable abilities to manage in the best manner a farm of 300 acres in tillage, I should suppose, that were the vast abilities of a *Fox*, or of a *Pitt*, to be concentered on agriculture, with an inclination to the profession, they could with equal ease manage a farm of ten times the extent; at least, those who undertake such a charge, and do justice to the subject, might be considered in agriculture, as those two great characters are in politics, as among the most enlightened of their compatriots.

A farm in the vicinity of a great town, requires more abilities to manage in proportion to its extent, than a farm in a more remote situation; because the branches of operation are more minutely divided, and the sources from which the revenue is obtained, flow in more various channels, while the general economy of the whole is regulated by more uncertain and variable principles.

4th, Of *several* farms in the possession of *one* farmer, lying at *a distance* from one another.

In this system, the advantages are not altogether so great as when the farms are contiguous. For, *1st*, The contrast in the soil gives no advantage in the labour, nor can the strength of the whole be concentered on one object; of course, a greater expence in labour is incurred. *2d*, As the master cannot oversee the whole personally, he must delegate his authority in part to an overseer, which seldom turns out so effective. But, in other respects, the advantages are nearly equal, and in population it is superior; for more people are required to do the same work. The profit, of course, will be diminished; but as the farmer will be more in the practice of traversing the country, he will naturally become more intelligent, and thence carry on his plans more judiciously.

Head II.

Of Farms altogether in Pasture, including a small proportion of Tillage for raising Corn and Potatoes for the residenters.

These may also be considered under the same sub-divisions as in the former head.

1st, With

1*st*, With respect to mechanics interfering with this system, there is hardly an instance, though it would be much more for their advantage, if they converted their pitiful possessions to the maintenance of a milch-cow, or the rearing of a young beast, than in their present wretched system of tillage, oppressing themselves and disgracing the country: but, for this purpose, it would be necessary that their patches were inclosed; but that would be by far too great an exertion for their genius; and so I shall leave them to their own mismanagement.

2*d*, Of *small* pasture farms in the occupation of tenants having *no other occupation*.

There cannot well be a very small farm of this description, as the attention required would not be sufficient employment, neither would the profit to be derived be a sufficient recompence for constant attention. They must necessarily, therefore, be of greater extent than the small arable farm where there is always abundance of employment to the little tenant, and although there may be little recompence to him as a *master*, yet he is generally understood to be sufficiently remunerated for the labour which, as a *servant*, he bestows upon it.

The same circumstance which promotes the prosperity of a corn-farmer on an arable farm, and the consequent prosperity of the country, will, I am persuaded, operate in the same manner upon a cattle-farmer in a pasture farm; viz. that the larger that the concern be, if the tenant has abilities answerable, the more enterprising will he become, and the country will the more speedily be improved in the breed of cattle, and melioration of pasture lands.

3*d*, Of *two or more* farms lying *contiguous*, in the occupation of one tenant.

That the tenant in this situation will be more wealthy and more intelligent, and hence, being more enterprising, will be more beneficial to the country, has already, in the foregoing article, been noticed, in addition to which the following remarks occur.

A man will be able to manage a pasture-farm of greater value and greater stock, on a rich soil than on a poorer one, which must be more extensive to yield the same produce.

and will therefore require more exertion to oversee. The quantity of land and quantity of stock that a farmer may have abilities to manage in a pasture farm, may be vastly greater, than in a farm under tillage; as there are fewer servants to oversee, and as the process of breeding and feeding cattle is much less complex than that of raising corn.

The effect on population, of uniting two or more pasture farms into one, will be much the same, as formerly stated, with regard to farms in tillage; for, although the tenant may be enabled to keep fewer herds, yet he will naturally chuse that these should be married men, boarding in their own families: even were this to produce no increase of population, it ought to be held as beneficial to the country; for the great farmers herds have a better chance of getting full employment, than in a small farm tending a small flock,

"The herd diminutive, of many hues." THOMSON.

where they are little better than half idle: for a population of idle people ought to be exploded; as not only are the faculties of these people themselves locked up for want of exertion, but the money which their maintenance requires, is thus diverted from the channels of enterprise and improvement into which it might otherwise have flowed.

4th, Of *several* pasture farms, at a *distance* from each other, in one tenant's occupation.

The effects in this case are almost the same as if the farms lay contiguous, provided each separate farm has all the varieties of pasture, and proper shelter for the cattle; but if this is not the case, it were better for the farmer (and for the public) that they lay conterminous to one another, as they thereby could afford accommodation, to the mutual advantage of the whole. So far, also, as loss may arise from the master not being able to superintend the whole, so far will there be a disadvantage in having distant farms in pasture, as well as distant farms in tillage; but, on the other hand, as was before observed, the farmer himself will become more intelligent, in proportion as he has to traverse a greater range of country, from which he will the more readily introduce or make improvements in the breed or management of his flock.

HEAD

Head III.

Of Arable and Pasture United.

Whatever has been said respecting the *size* of farms, in the two former heads, is equally applicable to this; the larger that the farms are, the more intelligent and enterprising will the farmer himself be; and hence, from his more spirited and judicious exertions, the community at large will derive a greater advantage.

This mode, or system of farming, is the most judicious of the whole, as it promotes the interest of all parties concerned, the proprietor, the tenant, and the public at large, more than either of the two modes separately. It promotes the interest of the proprietor, by affording him a greater rent: It promotes the interest of the tenant; because he will be able to manage a greater extent of land, than in a farm wholly in tillage; and he will have more intercourse with the world, than in a farm wholly in pasture; and hence, performing more business, and being more enlightened, he will become more wealthy: Finally, it promotes the interest of the public; because a greater proportion of the produce will be brought to market, and even a greater crop produced. This arises from two causes: 1*st*, there will be fewer unproductive cattle to eat up the produce at home: 2*d*, The lands being alternately in tillage and in grass, they will be kept in better condition; and the crops of corn, and of hay or pasture, will be more luxuriant, and of a better quality.

With respect to *population*, this system is unfavourable in one case, and favourable in another. It is unfavourable in the case of converting a farm, that had been wholly in tillage, into part tillage, and part pasture; for pasture-land always requires fewer people to manage it, than lands in tillage; but for the same reason, it is favourable to, or increasive of population, when pasture lands are converted to the production of grain. In a great proportion of the best lands of England, it would be highly for the advantage of all parties, that this system were adopted, instead of the grazing system, which prevails without variation. In Scotland, however, the case is different; there, the greater part of the arable lands, which formerly were kept wholly under the plough, have been most judiciously improved, from the introduction of this alternate

system, and which has, to a certain extent, diminished the number of people employed in agriculture, greatly to the mortification of the gloomy-minded declaimers against the present times, who, in the blindness of their rage, denounce the uniting of small farms as the cause of this mistaken national calamity. But, even were this notion to be well founded, (and it would not be difficult to shew that it is not), yet surely it is not solely the *numbers* of people employed in any profession, that ought to render them respectable in the State; regard must also be had to the *ingenuity* with which they are actuated, and the *industry* with which they carry on their operations. People, not judiciously employed, are little better to the State than if they were not employed at all. H.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

GENTLEMEN,

As a reader of the Farmer's Magazine, and a well-wisher to that Publication, I send you the following observations and experiment, anent the raising of cabbages and open kail.

Owing to the severity of last Winter, and inclement Spring, kail plants of every description were scarce, and ill to be got in the north of Scotland; in particular, the different species of cabbage plants; and what remained, were so weak and small, as scarcely to be worth planting. Having some roots of the early kind of last year remaining in the ground, which were beginning to put out young shoots about the end of April, the idea struck me of pulling these old roots, and after stripping them of all the young shoots, except the strongest and healthiest-like one, to replant them on another piece of ground, in the following manner: I caused a small furrow be made in the ground of the plot I intended for them, and put the old stock on its side, covered it up with earth, keeping the shoot above like a young plant. They never went back, grew remarkably fast, and have closed very well; and were several weeks earlier than those planted from young plants before them.

I tried the same experiment with open kail, and find they answer equally well.—If you think this may be of any use to the public, or considered worthy of a place in your publication, you are welcome to use it. I am a wellwisher to agricultural improvements.

July 15. 1800. *A Perthshire Farmer.*

TO

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

GENTLEMEN,

I take the liberty of sending you some observations on the use of lime in Yorkshire; which, if they meet with your approbation, may be inserted in the next Number of the Farmer's Magazine.

The common way of using lime in the West-Riding of Yorkshire, is to lay it upon Summer-fallow that is intended to be sown with wheat, in the proportion of from 100 to 150 bushels of shell-lime, brought from the neighbourhood of Pontefract; it is applied at any time during the Summer that suits the convenience of the farmer. Some farmers lay the same quantity upon the turnip-fallow, with the addition of *farm-yard dung*, bones, or *rape-dust*; in either of which cases, when it is laid upon land that has been long in tillage, and previously limited, it is of no service; and if the Summer months are warm and dry, it is often destructive to the turnips. This error arises, partly from an ignorance of the properties of lime, and partly from a want of due attention to the state of the soil to which it is applied. There is a lime of another kind in the West-Riding, got at Emsall near Doncaster, which is often used for wheat, generally upon leas after oats or barley: it is spread upon the stubble before the fud-furrow is given, and generally found serviceable; as in that way it meets with abundance of vegetable matter, upon which its action is exerted. This lime is said, by a person who examined it chemically, to contain clay, in the proportion of one third of its weight. From sixty to eighty bushels are laid upon the acre. From its strength, it does not appear that the land will bear more; as, in most instances where a greater quantity has been applied, it has been found to hurt vegetation. This is the result of the experience of almost every farmer in the circuit where it is used.

The Pontefract lime is mixed with sand, nearly in the proportion of one third of its weight, and, being of a milder nature than that already described, requires to be laid on in greater quantity; 200, and even 250 bushels, unslacked, are frequently laid upon the acre with advantage, especially when well watered.

It appears that no correct idea has yet been formed, either of the qualities of lime, its operation upon the substances it meets with in the soil, or the quantity required for different soils. Owing to a want of this knowledge (a thing surely attainable)

tainable) much money is uselessly expended, and much labour bestowed, which, under the direction of better information, might be saved. The principal error of our farmers, consists in supposing lime to possess fertilizing qualities in itself; and that, without operating upon the soil, or the substances it meets there, it is an enriching manure. Chemistry has discovered no other principle in limestone, but calcareous earth kept together by fixt air, with the addition of clay in some instances, and sand in others. Mr Anderson of Aberdeenshire says, "Lime can have no manure within itself; but operates only as an alterative or stimulus to other manures."

In this place, I am sorry to differ in opinion with Mr Anderson, to whose disquisition I am in a great measure indebted for the little knowledge I have of its nature; as to its operation, I speak from experience and observation. In Vol. I. p. 484, Mr Anderson says, "Calcareous matters act as powerfully upon land that is naturally poor, as upon land that is more richly impregnated with those substances that tend to produce a luxuriant vegetation." If Mr Anderson meant barren moor land, that has never been in a state of cultivation, covered with bent, heath, lyng, and other vegetables, I agree with him; but not upon poor soils that have been long in tillage.

Mr Anderson further observes, "Writers upon agriculture have been long in the habit of dividing manures into two classes, viz. 1. Enriching manures, or such as tend to render the soil more prolific, however sterile it may formerly have been; of this class, dung holds the first rank. 2. Exciting manures, or such as are supposed to have a tendency to render the soil more prolific, merely by acting upon those enriching manures that had been formerly thrown into it, and, for want of a proper stimulus, had remained dormant." Lime is unquestionably the foremost of this class. With this doctrine my own experience in a great measure agrees; as every observation I have made, confirms my belief of its being a stimulus only. The same author further observes, "That, in consequence of this theory, it would follow, that lime would only be of use as a manure, when laid upon rich soils; and that when it was applied to poor lands, it could produce no good, and in many instances hurtful effects."—"I will frankly acknowledge," says he, "that I myself was so much imposed upon by the beauty of this theory, as to be hurried along with the current, in the firm persuasion of the truth of this observation; and for many years did not sufficiently advert

vert to those facts that were daily occurring to contradict it. I am now, however, convinced, that lime, and all calcareous manure, produce a much more immediate improvement upon what are termed sterile soils, than upon such as are richer; and that lime alone, upon such soils, will produce a greater, as well as more lasting degree of fertility, than even the best dung."

This assertion of our author, is not quite in unison with the other parts of his work; where, after a very learned disquisition upon the qualities of lime, and its formation in the bowels of the earth, he concludes in a manner that does not warrant the idea of its operating in the way he mentions; and I can with truth assert, that I have never found it to repay the expence when laid upon wore-out lands, and such especially as had been previously limed.

My own experience enables me to recommend the use of lime, in the following manner: Let the farmer consider well the state of his ground, and its management previous to putting on a dressing of lime. If it has been ploughed out of grass, either having lain long in meadow or pasture, a heavy dressing, of from 250 to 300 bolls per acre put on a good Summer-fallow, will be of very great benefit, as, upon such soils, it will meet with abundance of vegetable matter, upon which it will act in such a manner as to increase its fertility. It may also be used with advantage, every eight or ten years, upon land that is kept under the plough; provided it is well manured with stable-dung, bones, or rape-dust, especially if such lands are under a proper rotation, such as, 1. Turnips; 2. Barley, with grass-seeds; 3. Pasturing with sheep; 4. Wheat. Where it is used in this manner, I would recommend it to be laid on in the early part of Winter; in that way, it will become perfectly effete before the turnips are sown; a matter of more importance than is generally imagined.

It will also be highly beneficial upon strong and wet soils, where a suitable rotation of crops is followed. The rotation I would recommend is, wheat or barley after fallow, broad clover, white clover and grass seeds; pasturing with sheep as much as possible; afterwards wheat. This is at present the practice of the best farmers. I am,

GENTLEMEN,

Your obedient servant.

A YORKSHIRE FARMER.

FOR

FOR THE FARMER'S MAGAZINE.

Letter from a Scots Farmer, during a Tour through England, to his Friend in Edinburgh.

LETTER IV.

Having now seen several of the best cultivated English districts, I proceed, with great satisfaction, to detail my remarks on the husbandry of Essex, Suffolk, and Norfolk; and I am truly sorry that the condition of some of the conterminous counties prevents me from bestowing equal praise upon the management therein generally practised.

Leaving London upon the last day of June 1799, we travelled through the heart of *Essex*, by *Rumford* and *Colchester*, and in our progress saw much to commend, and very little to censure. The general soil of the district through which we passed appeared to be of the kind usually called *loam*, though of many varieties; the greatest part of it, as we were informed, was under lease; and the possessors are eminently respectable.

You will easily figure, that a passing stranger ought always to speak with diffidence upon those matters. It is only a small part of the country which he can personally examine; and he is necessitated, in numberless instances, to take his information from persons, who, perhaps, are unqualified for communicating it in an accurate way. Still, under these circumstances, if he sees a country well cultivated and uniformly productive; if he discerns good houses, good fences, good implements, and good roads; he may fairly pronounce its rural economy to be in a comparatively perfect state: and all these things are to be found in the county of Essex in a superior style.

Very little naked Summer-fallow is discernable in Essex; nevertheless the ground is generally in a clean and husbandman-like condition. The anti-fallowists bring this as an argument against the necessity of fallow in other districts, without reflecting that the soil, climate, and practices, are materially different from almost every other part of the kingdom, and cannot be imitated, unless perhaps in five or six counties. The argument, in fact, cuts two ways. A want of fallow, either proves that the land is very well, or very ill managed. In Essex, we admit, it is a proof that a proper system is practised; but many other counties have as little fallow

fallow as Essex; the consequences of which are,—the ground is dirty, being stocked with annual and perennial weeds, instead of corn and artificial grasses; unproductive to the possessors, because the strength of the soil is carried off by the aboriginal inhabitants, who enjoy an hypothec preferable either to the Crown or Landlord; and incapable of receiving suitable cultivation, until they are dispossessed.

The great object of the Essex Farmer appears to be, to raise wheat; and, in our view, three eights of the arable land were carrying that golden crop. We saw few oats; not a great breadth of barley; while perhaps one half of the district was under the meliorating crops of clover, beans, peas, potatoes, and turnips. If there be a just principal in farming, it is to have culmiferous and leguminous crops alternately; and in Essex this principle seems to be adhered to steadily. It is not a matter of great importance, which of the varieties, that is to say, whether wheat, barley, or oats, are taken as the culmiferous crop; but the selection ought to be made in conformity to the soil, season, climate, and markets. These circumstances all operate here in preference of wheat, and the Essex farms very judiciously bestow their chief attention to its culture.

We were, in truth, greatly delighted with the husbandry of Essex, as it is, in a manner, all cultivated like a garden. The possessors are in a flourishing state, and marks of opulence are discernible among the great body of them.

After viewing the town of *Ipswich*, which is a large place, we proceeded through the county of *Suffolk*, which, making allowance for local circumstances, is under similar good management with Essex. The soil, however, is not so deep; a great part of it is incumbent upon sand and chalk; and the distance from London lessens the value of the commodities produced. The cultivation was admirable, the rotations excellent, the lands clean, and the crops which covered the soil were weighty and luxuriant.

Here the *wheel-plough* came under our inspection; but it shall be noticed at greater length, when we enter upon the husbandry of Norfolk. The best breed of *horses* for country use is to be seen in Suffolk; they are not very tall, but broad, full barrelled, well shouldered, and generally of a chesnut colour. They are of an excellent size and strength for rural employment; and, except in the difference of colour, bear a greater affinity to our best Lanarkshire horses, than any other breed in the island.

The

The management of *dung* is here well understood, as none is laid upon the ground, but what is in the most perfect rotten state. It appeared that a year's dung is in most cases kept on hand, or otherwise it is difficult to conceive how the preparation of it could be so forward. The farmers were busy in driving it out to their turnip-fields, upon which dung in no case should be applied, unless fully ripe.

Every agriculturist has heard of *Norfolk*, and its husbandry; and perhaps no more has been said in its favour than is justly merited. With a large portion of sandy soil upon a bottom of chalk, it is one of the most productive counties in the kingdom, and, acre for acre, exports more produce than any other district. To what cause can this superior produce be assigned? Other counties have better soil, as good a climate, superior local advantages, and yet are undoubtedly far behind this celebrated district, in the extent of rural commodities carried to market.

Many causes may be assigned for this celebrity, which we shall slightly notice: 1*st*, The greatest part of the land is under lease. 2*dly*, the farms are of considerable size. 3*dly*, As few manufactures, except at *Norwich*, are carried on, the capital stock of the inhabitants is chiefly employed in cultivation. *Lastly*, the turnip system being early introduced, proved of essential service, in bringing the numerous and originally barren sands of the district into a fertile and productive condition.

The defective parts of the Norfolk management (and we state them with diffidence), are, the general use of wheel-ploughs; the common mode of raising turnips, viz. in the broad-cast way; and the folding of sheep. These are undoubtedly antiquated practices, and ought to be exploded by such enlightened cultivators

Wheel-ploughs have certain properties which are not possessed by the *swing-plough*; such as—they may be pitched to any deepness necessary, and the breadth of the furrow may be regulated with almost mathematical exactness. They are also capable of being wrought by unexperienced ploughmen, which is not the case with the swing-plough; but, perhaps, to this source may be traced the very general bad ploughing practised in many parts of England. Without, however, enlarging upon this topic, it may be added, that the increased friction of the wheels overbalances any benefit gained by the uniform deepness with which the instrument goes; and that a swing-plough, provided with a similar

similar share, and in the hands of a good ploughman, is capable of executing as much work, and is easier drawn, than the wheel-plough.

As for broad-cast turnips, we are at a loss to conceive what advantage can be gained by this mode, in preference to drills, especially upon such soils as prevail in the county of Norfolk. That it is an easier business to clean the crop by horses, than by manual labour, we suppose, will not be disputed; and, that a weightier crop may be gained from a regular planted field, than from one where it is physically impossible the plants should stand at equal distances, we should also suppose equally indisputable. To the force of custom, the prevailing practice can only be assigned; for in no part of Britain could they be raised at less expence, in drills, than in the soft, pliable, and easy-wrought sands of Norfolk.

The folding of sheep, at one period, when so much of the county remained in an unproductive state, might, in all probability, be a very necessary practice; and the breed generally kept, undoubtedly possesses properties which eminently qualify them for this treatment. In the present improved state of this county, it scarcely admits a doubt, but that sheep of superior qualities might be introduced; and, indeed, many farmers already prefer the Lincoln and Leicester breeds, as being cleverer feeders, and easier kept within the inclosures, than the original stock.

Lynn, *Yarmouth*, *Blackney*, and *Wells*, are the chief ports from whence grain is shipped in this county; and the value, in ordinary years, we are informed, amounts nearly to one million Sterling *per annum*. The value of the cattle, sheep, lambs, &c. sent out of the county, has been calculated at nearly four hundred thousand pounds Sterling, in the same period; which is an astonishing produce from a district, the greatest part of which is far from being naturally of a good soil, and affords a convincing demonstration of the extent to which Britain is capable of being improved, providing the legal disabilities, which presently obstruct it, were removed.

About *Lynn*, the soil is of a heavy nature, but rich, and carrying good crops, and, from the lowness of situation numerous ditches, or open drains, are found necessary for carrying off the superfluous water. The hundred of Marshland, which lies to the westward of Lynn, is composed of a rich water-fat soil, (probably, a deposit, in former times, from the sea), but stands much in need of drainage.

Before

Before leaving this celebrated county, which well deserves the attentive examination of every agriculturist, it is proper to notice the practice, recently introduced, of *dibbling* wheat. We did not find it to be upon the increase; and, from an examination of several fields managed in this way, it did not appear that the crops would be superior to those sown in the broad-cast manner. One of the chief advantages, viz. that of hoeing, was generally neglected; and the saving of seed, in the first instance, is compensated by the extra expence attending the process.

From *Lynn*, we came to *Wisbeach* in *Cambridgeshire*.—The whole of the land is of a marshy description, carrying fine grass, and also corn, where it was tolerably drained. On entering Lincolnshire, we found a continuation of the same rich soil; and, about Long Sutton, the natural quality is superexcellent. Travelling on by *Holbeach*, *Spalding*, and *Sleaford*, we viewed the finest pastures imaginable; and, where the plough was used, which was but sparingly, the crops were equally good, unless in those places where the Spring floods had ocasioned the seed-time to be too long delayed. There is an extent of ground, nearly fifty miles in length, of this kind of land, before we reached the dry upper parts of this county, through which the roads are uniformly made with sand, digged from the subsoil of the adjacent fields; and this mode of repairing them, occasions a heavy expence to the traveller. Perhaps, no tract in the kingdom is capable of supporting a greater stock, during the summer months, than the one just examined.

Before our arrival at *Lincoln*, we passed through many barren heaths, and numerous rabbit-warrens. *Lincoln* is a large city, and the cathedral an elegant piece of architecture. We did not hear of any manufactures being carried on here; though the raw material being more plentiful in this county, than in any other part of the kingdom, led us to think the woollen manufacture might be successfully introduced.

Leaving *Lincoln*, we found an extensive common-field, all in fallow, at the very gates of the city, which appeared to have got two ploughings, and was carrying a strong crop of thistles. Numerous flocks of sheep were folded upon this fallow-field, which certainly gave fine encouragement for the possessors to clean the ground. It is no wonder that so many English writers declaim against fallow; for, under such management, as practised upon the field before us, the loss of a year's rent, and value of the labour, would scarcely be compensated by the superior value of next year's crop.

But

But of all the fallow fields which came under our observation, one, a short way from *Brigg*, was under the most wretched management. It was an extensive common field, of good soil, but very foul, and had received only a single ploughing, which was given by cleaving down the high broad ridges. To our utter surprise, though in the first week of July, the possessors were covering the quick weeds and thistles with dung; they had not so much as given it a harrowing; but with their three and four-horse teams, were driving out the manure in all directions. We held up our hands in amazement at such barbarous conduct: and one of my friends was for clearing the country of such *Goths*, and transporting them at once to Botany Bay, where indeed many have gone, who were nuisances to their country in an inferior degree.

The upper parts of Lincoln are crowded with these common fields, and they in reality entail shame upon its husbandry. The improvements made upon those lately divided, give the most convincing proof of the benefit attending the laying them in severalty. At Barton upon the Humber, where a large common field was lately divided, we saw as well managed land as could be desired. A Mr Graburn now possesses considerable portions of this field, which are well inclosed, carrying crops of excellent quality, clean, and in the most perfect order. It is a real pleasure to examine such management.

Crossing the Humber from Barton, we landed at Hull, which is a populous town, and carrying on an extensive trade to the Baltic, and other parts. From this place, we came up to the East Riding, by Beverly, to York, and were rather disappointed with the country through which we passed. About Hull, the land is chiefly in grass, as is indeed a considerable proportion all the way to York. Some of the land is of a dry moorish kind, carrying heath and gorse; and at the gates of York we viewed a common field of fine dry deep loam, which was in a condition not much superior to those already mentioned.

As the remainder of our route homeward was through the tract of country described in the first of these letters, it is unnecessary to trouble you with our progress northward; and shall conclude with the following observations:—That, wherever we have found common fields, the husbandry was uniformly bad, though in different degrees: That, wherever the land was possessed without a lease, its condition was

good or bad, according to the confidence reposed in the proprietor: and, where held under that security, the management was generally good. In the grazing line, the English farmers may be considered as superior to their Scotish brethren, though the latter will not lose in comparison, wherever the plough is introduced.

I am, yours, &c.

N.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

On the Abolition of Tithes.

GENTLEMEN,

THIS subject having already attracted considerable notice in some of your preceding Numbers, I trust to the impartiality you profess, that what I have now to remark, although perhaps differing in some degree from your own sentiments, may, nevertheless, find a place in the Farmer's Magazine, which seems to be, of all other periodical works, the fittest for discussing this important question.

Whether tithes should be abolished or not, may perhaps best appear from inquiring how they affect the interest of the parties concerned, who may be arranged into the following classes: *First*, The Proprietors of the ground which is liable in tithe: *Second*, The Clergy, whose revenue is at present payable from it: *Third*, The Farmers or Tenants, from whose crop and cattle the tithe is taken: *Lastly*, The Community at large.

First, then, as to the PROPRIETORS. To me it appears, that their interest is strongly affected by the tithe, and that they are particularly interested to get it abolished, because they do not get a fair rent for their land, or as much as it would otherwise bring, (exclusive of an equivalent to the clergy), were there to be no tithe drawn at all. My idea is, that were a farm, including the tithe, to be intrinsically worth 130l. a-year, and that the tithe itself amounts to 30l.; yet the proprietor, instead of getting 90l. of rent, as he ought, for such a farm, would not get more than 80l., and not even so much; for, as the drawing of tithe in kind is always a harassing circumstance, the tenant, in making his bargain, will have,

have, not merely a deduction from the full value of the farm, equal to the amount of the tithe, but also an additional allowance for the trouble and inconvenience he is put to, from the drawing of it in kind.

Second, With respect to the CLERGY, they are of all parties the most interested to see the tithe abolished; for, of all modes of receiving their salaries, the most disagreeable and vexatious must be that of gathering in the tithe in kind, the very quantity being altogether undefined, and continually changing from one species of crop, or of stock, to another; thus placing them in a situation in which they have hardly any alternative, but that of perpetually quarrelling with their flocks, or of submitting to be cheated by them out of their lawful revenue.

Third, With regard to the FARMERS or TENANTS, I should imagine that these are rather more interested to retain the tithe, than to see it abolished, notwithstanding the outcry they make on the subject; for, if it be true that the proprietor does not receive the full value of his lands, (exclusive of the allowance to the clergy on account of the tithe, which I should think is indisputable), it must follow, that what is thus lost to him, will go into the pockets of his tenants. It is the exacting of the tithe in kind, which I take to be the chief cause that in England the lands are not only lower rented than in Scotland, in proportion to their real value and produce, but likewise, as a natural consequence of this, that the English tenantry are, in general, in more easy circumstances than the Scotish tenantry are.

Lastly, So far as regards the community at large. It has been urged vehemently, that tithe has an effect to prevent the improvement of waste lands. If such were really the case, tithe would, no doubt, in this instance, be prejudicial to the public interest. I am, however, inclined to suspect, that the clamour on this point is altogether without foundation. Let us suppose land, in a waste or unimproved state, feeding geese, sheep, or milch cows, (the usual stock on an English common) and to produce to the value of 5s. the acre yearly, of which the titheman draws 6d. leaving 4s. 6d. to the occupiers of the soil. Now supposing this land improveable, to the extent of yielding yearly 5l. the acre, of which 10s. would go for tithe—could the drawing of this tithe be a rational excuse for not improving this land, when, instead of 4s. 6d. the acre, the cultivator would have 4l. 10s. to himself?

In like manner, I hold it to be a mere excuse for indolence, to say, that lands, already partially improved, cannot be fur-

ther meliorated, from the dread of increasing the tithe; for whatever addition is, in this manner, made to the income of the Church, the improver himself adds nine times the sum to his own. That lands highly adapted for alternate cropping, in pasture and in tillage, may be kept perpetually (to their loss) in the former state, is, in England, I believe, the fact, entirely on account of the tithe, which is more moderate in the one case than in the other; but, still, whatever bad consequences may ensue to the community from this propensity in the husbandmen, should not so much be imputed to the operation of the tithe, as to their obstinate mulishness, who, rather than the *parson* should derive any benefit from the *tenth* part of the improved produce, will deprive themselves of all the other *nine!*

I know, however, that much may be said on the other side of this question, and not a little declamation may be used against the clergy themselves, for "gathering where they did "not scatter, and reaping where they did not sow." But, leaving speculative opinion entirely to itself, I would fain know the fact. There are many estates and farms in England, and in every county in it, which are *tithe-free*. Now, what I would wish to know is this, Are these tithe-free lands universally, or even generally, better cultivated under every other like circumstance, but liable in tithe? This fact, as it may turn out, should go farther towards conviction, than a whole volume of argument.

That tithes were abolished as completely in England as in Scotland, and the revenue of the English clergy (without diminution) were to be collected in as unexceptionable a manner as amongst ourselves, are circumstances, in my mind, very desirable. But the English farmer is not the party most concerned in the abolishing of tithe. Let him rather try to abolish some of his own practices, that are as much repugnant to good husbandry, and more within his reach. Let him abolish his own English fallow (land left to *rest itself* both from crop and tillage). Let him abolish his broadcast; 5 *ton the acre* turnip; the plough with 5 horses in a line; and *eke the plough with oxen* 8, *and stout men* 3; and (if one durst mention it) his notable practice of burning his hay, which this season has required no little dexterity to accomplish. But, alas! why should I advise him to all this? The tithe, already a grievous burden, being through these means *doubled*, would become insufferable!

A SCOTISH FARMER.

Mid-Lothian, September 5. 1800.

TO

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

GENTLEMEN,

THOUGH the greatest part of the following letter, from a servant of the Earl of Stair, written a short time after the battle of Dettingen, to his friend in Ayrshire, may appear rather incongruous with the general design of your publication; yet, as it was written by a farmer's son to a farmer, and contains some information relative to the state of husbandry in Germany, I hope it will procure a place in your next number. I am,

Your's, &c.

N.

Hanau, July 20. *N. S.* 1743.

DEAR SIR,

I HAD the favour of your letter of the 5th April, a few days before the battle of Dettingen. I thought to have written to you by the messenger that carried the news to England; but I had neither time nor conveniency till it was too late. As you will have, long before this time, got the true relation of that affair in the newspapers, I shall not take up your time with any accounts of it, farther than adding the abstract of the whole killed and wounded on our side, which, I believe, you will scarce have got till this comes to hand.

British men, killed and wounded,			821	Horses,	482
Hanoverians, ditto,	-	-	553	-	71
Austrians,	-	-	977	-	50
			2351		603

The day after the battle, we marched to this place, where we continue. It belongs to the Prince of Hesse, and lies on the river Mayne. The army is encamped between this and Frankfort. The French encamped for a fortnight on the other side of the river. About a week ago, they marched off, and left us this part of the country to ourselves. We hear, they have crossed the Rhine at Worms. The Marshal Broglio has likewise left Bavaria with his army, and is crossing the Rhine about the same place: some say, they are going back to their own frontiers. Prince Charles is following Broglio at the heels with his army; and, if your old master

had got his will, he would likewise have followed the Duke de Noailles with his army, and, I believe, would have given a very good account of them. But our ministry are not blood-thirsty: most people here wish they had stayed at home.* The Emperor has declared himself neuter, and a peace is negociating between him and the Queen of Hungary. The French are doing all they can to hinder it. The French minister at Frankfort assures the Emperor, that France will never lay down her arms till she see him right; but it is every body's opinion, he will trust himself no longer in their hands. The 20,000 Dutch are on their march to join this army; the last troops sent from Britain are likewise on their march from Flanders, and expected here soon; it will be a fine army when they are all together.—So much for news.

You flatter me with coming home a great man;—it is what I don't at all expect, and have as little thought of soliciting any thing from his Lordship. Since I have been refused advancement in his own family, I can expect nothing after that. M. ——— and some more French rogues, have the whole management of the family, under Captain D., whom his Lordship has never yet been able to provide for; by which you may see commissions are not so easily got. We had another French rogue for our master of horse; but, on the day of the King's accession to the throne, Lord Lowdon and he had some words about his managing of my Lord's horses. That afternoon, the whole army fired three rounds on account of the day; and, after dinner, the Marshal went, with all his attendants, to the camp, where his Majesty was. Just as we were got out of the town, the master of horse, who rode foremost, and Lord Lowdon next him, turned about to his Lordship, drew a pistol, and desired his Lordship to draw; which he refused, as being below his dignity to fight with a servant of my Lord Stair's; upon which the rogue let fly at, but, by good luck, missed his Lordship and all the company. He thought to get off to the French camp, but was soon dismounted, and put in irons. He was set at liberty on the morning of the battle, with orders never to be seen about the family. Your old acquaintance Cornet ——— of my Lord's regiment, has got his place; so that nothing can happen that can push your friend D. higher than a valet-de-chambre. I wish with all my heart I had stayed at home at the

* The Earl of Granville, Secretary of State, was then with the King.

the weaver trade. Pray let me hear from you as oft as you please, with all the shire of Ayr news, and how affairs go on in Galloway; for I correspond with nobody in that country. The knight of Lochnaw and his men behaved very gallantly;—poor Sandy Maxwell was killed on the spot. I do not know how G—— behaved, but he came off scart free; and young French was in the heat of the fire, and was not hurt. My kind service to Mrs A——, and all your family; to Mr S——, if you happen to see him; and to honest A——, and all friends at Lowdon. Their Lord is made one of the King's aid-de-camps since the battle. On that day he acted as one of my Lord Stair's.

As I am writing to a farmer, which I had almost forgot, I must not end my letter without saying something about the manner of labouring here. All I have seen of Germany is an exceeding fine country; the mountains are covered with wood,—the plains with all sorts of excellent grain and fruit-trees. The grain they deal most in is rye and wheat, which they are now cutting down; but their oats and barley are very late. They have likewise a great deal of rape-seed and Indian corn, in great perfection. The soil is a light sand, and consequently easily laboured. Their plough is a very light thing with one stilt, and two little wheels which support the end of the beam. It is generally drawn by one ox; some use two, who draw by the horns, which is certainly a far better way than ours. One man holds and drives the plough, and I have counted twenty of them in one field. By shifting the mould-board, they go up and down the same side.

We have destroyed as much corn this summer, as would raise a famine with you, were the like to happen. We sometimes encamped in fields of corn as long as between the and Edinburgh, that would have covered the highest man in the army;—some they cut down to the horses, and the rest they trod under foot, which gave me a great deal of pain, not being used to that way. For these two weeks past, we have had a good deal of rain, and the weather is pretty cool.

When you are so good as to write to me, put your letter under cover to Andrew Mitchell, Esq. at the Marquis Tweedale's office, Whitehall, London.—I am, most sincerely,

Your's, &c.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

GENTLEMEN,

WHOEVER has been in the habits of conversing with practical farmers, must have observed the universal complaint, that few farms can produce a sufficiency of manure to go over the whole of their fallow-lands. This opinion is so generally adopted, that it is probable, nine-tenths of the farmers of this kingdom are persuaded that the evil is without a remedy. I therefore beg leave to offer the following hints to their consideration; being convinced, from experience, that, wherever they are adopted, and properly pursued, the most beneficial effects will ensue.

A farmer may obtain an extra supply of manure, by being situated near the sea-coast, and procuring sea-ware, &c.; or, by being within a moderate distance of a large town, where he may purchase manure of different kinds—as stable-dung, nightsoil, scrapings of streets, soot, bones, tanners' bark, &c.; but a cultivator, not blessed with such local advantages, must look out for other resources.

The first that occurs, is, watered meadows; which not only produce hay, without requiring any return of manure, but add greatly to the fertility of the adjoining fields, by the stock being carried into them every night, that are employed to consume the Spring grass and aftermaths. And it is not one of the least advantages, that the manure obtained in this manner, for laying upon the arable grounds, accumulates somewhat like money put out to compound interest; for, whatever increase there is in the quantity of straw, hay, or green crops, upon the uplands, by the increased manure from the watered meadows, will also increase the quantity of dung in the same proportion.

But it unfortunately happens, that this most advantageous species of improvement can only be adopted in particular situations where water can be had, and that of a proper quality; for there are some waters so much injured by mineral particles, as to be highly inimical to vegetation: this will be more particularly the case, in the vicinity of many species of coal-mines, where the waters are strongly impregnated with vitriolic acid: But such waters are confined to particular districts, and are small, in comparison with those of a more fertilizing

fertilizing quality. Water from calcareous soils is probably the most proper for vegetation; but this is not absolutely necessary; for the Cheviot mountains, and hills towards the heads of Tweed and Teviot, are destitute of chalk or limestone, yet the waters issuing from them are highly fertilizing; and there is no doubt, that innumerable streams are now running waste, in many parts of the island, which might be applied with the greatest advantage, and be a never-failing source for increasing the quantity of manure for the arable lands.

The quantity of manure might also be very much augmented, by substituting drilled leguminous crops instead of naked fallows, upon lands adapted to the growth of those species of grain. Every one allows, that the quantity of straw from a good crop of beans, will make a much greater accumulation of manure, than they would have had, if the same land had been naked fallow; but then they will contend, that the succeding crop of wheat will not be so good, nor the land so clean, nor so well prepared, as if it had been naked fallow.—This objection is a very natural one from people who have been accustomed to fallow every third year, and have got, from habit, a prejudice in its favour: with such people, nothing but experiment, or ocular proof, can be expected to make any change of sentiment. I would therefore beg leave to recommend, that fair experiments be made; and, if properly conducted, I believe they will find their crops of wheat equally good as after naked fallow, and their lands equally clean.

But I must particularly observe, that when I speak of drilled beans, it is not such as are drilled at twelve or eighteen inches intervals, and hand-hoed, but at thirty inches intervals, and horse-hoed; being fully convinced, that upon strong lands, and in dry Summers, hand-hoeing would be little more than skimming along the surface, while a proper formed horse-hoe would penetrate, and completely remove the soil, from four to five inches deep, and much more effectually eradicate weeds than it is in the power of hand-hoes alone to accomplish.

Another source of raising manure, which may be practised upon every farm, and in all situations, is that of giving cut clover, vetches, or tares, to horses, in the house, or sheds, through the Summer months; by this means, a considerable quantity of excellent manure is made, which would be in a great measure, if not totally, lost, were the horses suffered to depasture

depasture at large; the dung in the Summer months being mostly consumed by insects. This beneficial practice is also attended with other advantages; a less quantity of land will maintain the same number, and the horses thrive much better, as they sooner get themselves filled, and, of course, have more time to sleep and rest; and, by being in the shade, are freed from the plague and teasing of flies.

This practice might, in some cases, be also extended to cattle. In many parts of Germany, their oxen are kept constantly in the house, or sheds, and thrive equally well with those depasturing at large.

A considerable loss of manure arises from turning cattle out of the fold-yard, in Winter, to water or graze: it is a very mistaken practice, and tends materially to lessen the quantity, as well as quality, of the fold-yard manure, by the loss of dung and urine, and treading, while they are thus out, in many places, for several hours a-day. Every fold-yard, if possible, should have water brought to it, and the cattle never suffered to go out.

There are many districts, where the above practices are unknown or totally neglected: to such, I hope, these few hints may be of use. And am, &c.

C. ——.

Northumberland, August 25.

Fig. 2.

Fig. 1.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

GENTLEMEN,

THE very great damage occasioned by the ravages of the grub, to the wheat and oat crops, sown upon clover lea in the Spring of this year, made many people desirous of knowing the species of fly, from which this destructive reptile originated. From those that were opened in April and May, the embryo appeared to be of the beetle tribe; but, though this seemed probable, yet nothing certain could be determined from the appearance in so early a stage of its existence. In order, therefore, to ascertain the matter, I put some of them into a box with earth, and fed them daily with blades of wheat and oats, of which they ate considerable quantities, for five or six weeks, when they got into a dormant state, and continued so till the last week in July, at which period

period the flies extricated themselves from the husk, and, to my great surprise, were of the *Diptera Class*, and of that species known in the North by the names of *Jenny Spinners*, or *Long-legged Taylors*, &c. &c.

The drawing, which I send you, (Fig. 2.) is made from one supposed to be a female, with a truncated tail. Those which I conjecture to be males, have a sharp-pointed tail like a sting.

I also send a drawing of the grub, (Fig. 1.) of a medium natural size; they were from an inch to an inch and half long, of a brown greyish colour, having two streaks of a lighter colour passing from the neck to the tail, about half way between the back and sides.

Their depredations were mostly performed in the night, when they came out of their holes, and fed upon the green blades of corn; and, not content with what they devoured on the surface, they frequently dragged their food into their holes along with them, to allay the cravings of their voracious appetites in the day-time.

In several places, they were so very numerous, that the surface of the ground was comparatively as full of holes as a riddle, and ten or twelve of them would have turned up by a single scrape with one's foot.

It may be proper to remark, that their destructive effects were principally upon strong lands and moist soils: Sandy dry soils were perfectly free from them. A singular instance of this happened in a field of my own. A strip of dry loam, about forty yards wide, run diagonally across the field, upon which the oats were not in the least injured, nor any grubs to be found; but upon each side of this strip, the soil was a strong marly clay loam. Here the crop was in a manner totally destroyed, as far as this kind of soil reached; and this with so much precision, that, in the latter end of May, those parts of the field looked as brown as a bare fallow, while the crop, upon the dry loam, flourished with the most luxuriant verdure. Many fields of wheat were so completely destroyed, as to be obliged to be ploughed up for fallow. Some were sown with barley, which were also destroyed. The loss by the ravages of this species of grub, was, this year, almost incalculable, and such as no farmer living ever before experienced. I hope they will never suffer a similar calamity. And am, &c.

J. B.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

GENTLEMEN,

IF the following observations on the practice of paring and carrying off the surface, for inclosing, and covering cottages, and other purposes, so common in the highlands and uplands of Scotland, appear worthy of notice, they may be inserted in your next number.

Few practices are productive of equal mischief, or call more loudly for redress, than that of paring and carrying away the surface, a practice almost universal in the highlands and uplands of Scotland, whole districts being by that means rendered, in a great measure, useless for ever after, either for tillage or pasture. In every situation, however great its natural advantages may be, such waste and robbery of the soil induces a degree of poverty that can hardly be made up by the labour of ages. Accordingly, in England, where paring and burning has been practised to a very great extent, the soil has, in many instances, been reduced to a *caput mortuum*, notwithstanding the plentiful use of the best manures afterwards; an evil that has now become so apparent, and is so well understood, that the practice is interdicted by many proprietors, under very severe penalties.

Paring and burning, however pernicious it may be, (and upon thin soils it is ruinous), falls greatly short of the mischief done in the north of Scotland. In the one case, a part, at least, of the useful principles contained in the turf, is returned to the soil, by which means several good crops are obtained: in the other, the whole surface is carried off, and lost to the soil for ever.

Those who are able to estimate the extent of the injury that is thus produced, will view, with pain and disgust, the immense tracts that have been robbed of their surface, throughout a great part of the north of Scotland, where, in many places, only a few solitary tufts remain, to inform posterity, that these wastes, now so naked and desolate, were once covered with herbage.

Were this deterioration of the surface a matter of necessity, an excuse for the practice would arise out of that necessity. Even as it is, were the soil, of which the surface is thus deprived, afterwards applied to any useful purpose, something might be said in favour of the practice. No

such

such alleviation can, however, be produced. When used for cottages, the wretched hovels, constructed with feal, exhibit an appearance impressive of nothing but misery in the extreme; nor is their interior more comfortable. Perhaps, none, but those who have seen these cottages, would credit the description: taken altogether, they convey an idea of dirt and wretchedness, little short of what is met with in the caves and earthen hovels of the Esquimeaux. The walls abound with insects and vermin of every description; and, by continually crumbling down, keep every part of the hut covered with dust, and give it a most intolerable smell. The appearance, by fire or candle-light, is of the gloomiest nature, and such as it is impossible to associate a single idea of comfort with. This is the case, only where the walls are made of turf. When the roof is constructed of the same materials, the matter is still worse; for, along with the circumstance of its being unable to defend even a slight shower, the inhabitants are annoyed with vermin, and bits of the decayed soil, perpetually dropping down upon their persons, their beds, and even into their victuals. It will, no doubt, be observed, that custom has reconciled them to such habitations, and that they do not feel these uncomfortable circumstances in the same degree with people who have lived in cleaner houses from their infancy. Good and bad are, no doubt, comparative ideas; and the mind, accustomed only to a habitation capable of affording shelter from the inclemency of the weather, does not, without having seen something better, carry its ideas beyond it. This, certainly, is the case with the inhabitants of the north, in their early years, and while they remain in their native districts; but when they grow up in life, and visit other parts, they appear fully sensible of the comfort of clean warm habitations, and, on many occasions, express a lively regret at the comparison between their own wretched hovels, and the clean comfortable cottages met with in the south.

Where the happiness and *comfort* of that numerous and valuable class of men are considered as objects worth attending to, (and humanity, as well as sound policy, require that they should have every possible pains bestowed upon them), the circumstances mentioned cannot fail seriously to impress every humane proprietor. To such, the pleasures arising from improving the condition of so many of their fellow-creatures, will be a rich gratification; but, when that is coupled with motives of a different nature, immediately connected with their

their own and the public interest, no additional stimulus seems necessary.

A hut or hovel, such as has been described, is erected with greater labour, and perhaps expence, than would be required to build one with stone, and cover it with thatch or tiles. A great deal of soil, that might be rendered productive, is deprived of its surface, and either entirely destroyed, or very much injured, in procuring the materials. After all, the habitation is an uncomfortable one, and does not last a tenth part of the time that one constructed of stone and lime usually does.

The case is the same with fences made with this material. These, in their most perfect state, never look well, and are, for the most part found very unequal to the purposes of confining either sheep or cattle, or even of protecting corn crops. They are affected by every circumstance of the weather; moisture easily penetrates them; frost, in that state, swells, bursts, and throws them down. A Summer sun acting upon an earthen fence, that has been thus swoln, and rendered loose by frost, parches, and causes it to moulder down. Its perpendicular surface is, by that means, lost; the fence becomes a sloping bank, and must then be either completely rebuilt or the inclosure abandoned.

In the Highlands, and indeed over the greatest part of the north, there are at present many thousand fences of this description, that are now nothing but banks and mounds of earth; which, though they are no longer useful as fences, and though the fields from whence they were originally taken, continue to reproach the occupier, no attempt is made to render them useful, or repair the injury done, by carrying them off. The same blameable neglect prevails in regard to the ruins of their houses, it being by no means an uncommon thing to see the roofs fallen in, and the decayed walls standing, of whole groups of cottages, which, with a small degree of labour, might be converted into excellent manure; it being now well ascertained, that when turf has been used even for fences, and remained in that state for a year, or even for a few months, it is found to have acquired fertilizing properties, partly by the decay of the vegetable substances it originally contained, and partly by absorption from the atmosphere. Witness the good effects of fold-dikes, when used in that way.

When turf is used for constructing the walls of cottages, stables, &c. it is found to have acquired very high fertilizing powers,

powers, being richly impregnated with animal effluvia, and other matters. With this knowledge of its valuable properties, it must appear strange to see the materials of so many decayed fences, and ruinous cottages, lying in heaps all over the north, which might be rendered so valuable, with little trouble, and almost without expence.

To convey some idea of the nature and extent of the mischief arising from this practice, it is only necessary to notice the component part of the soil thus taken away. In all situations where land has been long undisturbed by the plough, the surface is found to consist chiefly of vegetable earth, arising from the annual decay of the leaves and other parts of the plants growing upon it: These falling down and rotting yearly, in process of time form a soil, whose principal constituent part is vegetable earth, and which, under proper management, is the best of all soils. If this is admitted, it must follow, that, upon waste lands, or even lands of a better quality, the preservation of the sod is an object of the first importance; and that every attempt to *pare*, *burn*, or *carry it away*, for whatever purpose, ought to be strictly prohibited. In many instances, the mischief already done upon thin soils is such, as must for ever prevent their improvement.

Even in districts where agriculture is pretty well understood, and where improvements have made considerable progress, it is no uncommon circumstance to see the proprietor or occupier carrying away the surface of the field he is inclosing, to build the dikes, leaving little behind in many places, but gravel or rock. Were the mischief arising from this practice out of the question, one would be tempted to smile at the absurdity of lavishing so much trouble and expence in erecting a temporary fence to inclose fields, the future improvement of which is, in a great measure, if not entirely, defeated, by paring and carrying off the most valuable part of the soil. What adds to the folly of the practice is, that every purpose for which turf is now used in these districts, may be answered much better by other materials that can be had upon the spot. Stones are every where plenty, and may be applied, with advantage, to the building of cottages and dikes; and, where straw is scarce for making the roofs, heath may be obtained in abundance, without any other expence than the trouble of cutting, which, when properly laid on, forms a very comfortable and lasting covering, both for cottages and stables. In this place, it is impossible to pass over a circumstance, which almost exceeds belief, viz. that in most cases,

cases, where such inclosures are making, and where many people are employed in paring the surface, immense quantities of stones are left in the field; the removal of which would answer the double purpose, of forming a lasting and useful fence, and clear the land of a nuisance, which, in all cases, ought to precede any attempt to bring it under the plough. Another practice remains to be noticed; that of paring their best pastures, and mixing the turf with their dung, to make what is called feal-muck. The numerous heaps of earth formed by decayed cottages and fences, have already been noticed; indeed, there is scarce a farm where some of them are not to be met with: the valuable qualities of turf and clay, after having been used for such purposes, have also been noticed: common sense, it might be supposed, would naturally point out earth of that kind as preferable to fresh sod; yet, strange to tell, in place of being applied to a purpose for which it is so well adapted, it is left in a neglected state, and an additional proportion of land deprived of its surface, to answer the same end.

This being in some degree a new subject, the strictures upon the practice will no doubt be unfavourably received by the tenants and cottagers in the districts where it is followed. Men, wedded to particular customs, are with difficulty brought to think, that they and their ancestors have so long followed a practice at once hurtful to the country and themselves: in this, as in many other instances, the united powers of habit and education form an obstacle too powerful for reason to remove, and which is proof even against the most convincing experiments. These observations, however, are not addressed to minds of that description: upon the enlightened proprietors in the North, they will have all the effect that could be wished: and, though they may not, with all their knowledge, be able to reason their tenants out of their prejudices, they have it fully in their power to alter their practice; which, it is hoped, they will be able to do at no distant period.

A. Z.

Fig. 1.

Fig. 2.

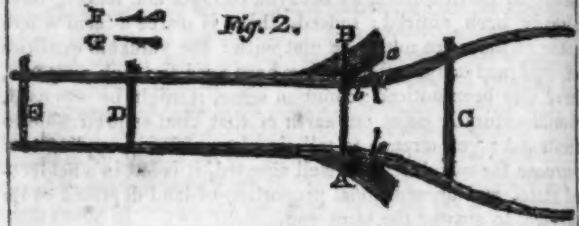


Fig. 3

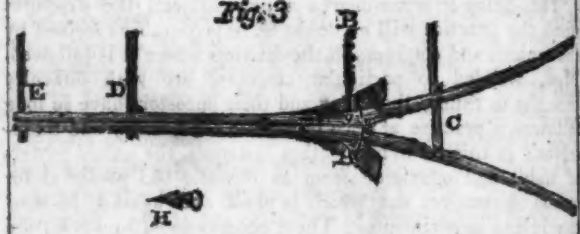
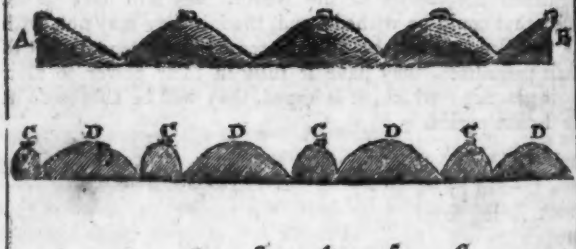


Fig. 4.



Scale of Feet.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

Description of a Plough for Cleaning Turnips.

GENTLEMEN,

I KNOW not whether it falls within your plan, to give plates of useful instruments in agriculture, or of such as are not generally known. To disseminate the knowledge and use of improved utensils, must conduce very much to the progress and advancement of agriculture; but of many it is not easy to give such accurate descriptions as can be perfectly understood, without the aid of drawings. There is a plough in *pretty general* use in Roxburghshire, in the culture of turnips; a description and drawing of which I have not seen in any agricultural book which has fallen in my way. In hopes that it might be agreeable to your plan to insert it, I have attempted the following description and sketch of it. The advantage is well understood, of going round each drill of turnips with the plough, and *taking the earth from* the turnips, previous to their being hand-hoed. This plough is constructed to *take the earth* from both sides of the drill at once, and also to ridge or *set up* the turnips again.

It consists of two ploughs, of a smaller size than the common plough, each of them without the small stilt or handle, but joined together with bars of wood and of iron; by means of which, the two ploughs can be fixed at any required distance from each other, when used in *taking the earth from* turnips; and when the two are brought close together, they then form a common double mould-board plough, for going betwixt the drills, and ridging them up.

Fig. 1. is a view of the plough, when ready for taking the earth from turnips, as it appears to a person standing on one side, and towards its front. Each beam has its separate coulter and feathered sock. AB is a pretty strong rod of iron, formed into a screw, in the greatest part of its length; which, being firmly fixed to the left-hand beam at A, passes through the other beam, to which it is fixed by means of two nuts with handles, which, screwed firm on each side of this beam, fixes the two at any required distance. C and D are two bars of wood (sometimes of iron), fixed in like manner to the left-hand beam, and passing through the other, where

they are fixed by means of wedges. E is a bar of iron, also passing through both beams, with holes in it for the purpose of fixing the bridle by which the plough is drawn. The mould-boards are fixed to the sheaths by hinges, and are placed at any required width, by means of two iron pins, *f* and *g*; which, going down through the beams, pass through holes in a thin bar of iron fixed to the inside of each mould-board. F and G are the two feathered socks. Fig. 2. is a view of the same, as seen from above; in which, the way of altering the mould-board is more distinctly perceived. The plough, when used in this way, is drawn by two horses. Fig. 3. is a view of it from above, when the two beams are brought close together, and they form one double mould-board plough; the coulters are then taken out, the two socks taken off, and the sock H put upon the points of both the sheaths, which cleans the bottom of the furrow betwixt the drills, and keeps the two sheaths firmly together. It is now drawn by one horse.

Fig. 4. is a rude sketch of a section of the drilled turnips; A B their form before the turnips are cleaned.

C C C C their form when the earth is taken from them with this plough.

D D D D is the soil taken from each side of the drill, and formed by this plough into a ridge in the bottom of the former furrow. When placed together, for setting up the turnips, it goes in the middle of this small ridge, and lays back the soil to the roots of the turnips.

When the common plough was used, it went first along the one side of the drill, and then the other; and, being too wide, it laid the soil too much upon the side of the drill.—It will be seen at once, that this plough does double the work of the common one.

I understand they are sometimes made with other two moveable mould-boards, which hang on by hooks, when the two beams are separated, as in fig. 1. and 2.; and it then will also set up two drills at once: but, in this case, they require two horses, and are made stronger.

They are also often strengthened by a bar of iron going diagonally from the hinder end of one beam to the fore part of the other, and which is fixed by a screw and two nuts, as the rod A B, in fig. 1. and 2. I am, &c.

S. E.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

GENTLEMEN,

I HAVE perused with satisfaction, and not without instruction, the three first Numbers of your Magazine; which, if it continues to be conducted upon the principles laid down in the introduction, promises to be useful to the agricultural interests of Britain. No part of the work is entitled to more credit, or appears to be drawn up with more judgment, than the last Quarterly Reports of the state of our agriculture: these undoubtedly are derived from the best sources, and convey a faithful detail of the state of the several districts mentioned. I say this, not from the perusal of your correct and accurate account, but from ocular evidence in many cases, and the best information in others.

It is, therefore, with a mixture of indignation and disgust, that I have lately perused the paragraphs inserted in many of our newspapers respecting the state of the crops, and the future prospects of the country with regard to provisions. At a pretty advanced period of the present year, vegetation was so backward, that farmers of the best judgment did not expect the harvest would be earlier than last year; and certainly nothing short of the uncommon and long continued heat and dry weather, during the months of July and August, could have shortened the period of our expectation, or altered the prospects of the country. About four weeks ago, owing to the early part of the crop having whitened (it would be absurd to say ripened) prematurely, and the rest advancing rapidly to the same state, there was, till the late rains, every appearance of an early and a general harvest. At that time, the newspapers, without attending to the circumstances that had gone before, inquired, "what had become of the predictions of those who foretold that the harvest would be a late one, and the grain ripened under all the disadvantages of a declining sun?" Had the Editor of the paper, or the Author of the paragraph, looked back at the period at which the observation was made, and calculated the probable chances in favour of its fulfilment, the inquiry would have appeared unnecessary: Experience, dearly earned, indeed, to the country, affords a distressing proof, how far even a week of bad weather may alter the most flattering prospects; for, though we can now reckon five weeks,

since the commencement of our harvest, four-fifths of the crop remains uncut, and so much altered, both in quality and appearance, as to be incredible to any but those who have been daily and attentive observers of the injury.

In another paper, notice is taken of the account given of the wheat crop, which is stated as not exceeding two-thirds of an average crop; a statement, says the editor, given for the express purpose of aiding Forestallers, Regraters, &c. Were such observations only to find their way into the best-informed circles, no mischief would arise from them; as good sense, aided by better knowledge, would form an antidote to the poison: But when it is considered what a wide range newspapers now take, and that they are perused even by the lowest orders of the community, who, from their ignorance, and the want of other information, are unable to detect the fallacy of the statements held out, and whose resentments are quickened by their necessities; the propagation of such statements ought not to be pardoned, upon the plea of misinformation, or defect of intellect, but should be viewed as offences against the peace of society, and punished accordingly. Every village has its weaver, cobler, or tailor, who reads the newspapers to an ignorant audience, and explains the different paragraphs, in a manner calculated to produce the most baneful effects.

To what is the spirit of discontent, unfortunately so prevalent in many parts of the island, on account of the scarcity and high price of provisions, owing? The answer is short—to newspaper misrepresentation. My situation in life affords me more than common opportunities of intercourse with the lower orders of the community; amongst whom, especially in towns, I have beheld the most complicated scenes of misery and distress, for many months past, notwithstanding the unequalled exertions that have been made by the superior ranks to relieve them. Upon many of these occasions, where I have met with wretches destitute of the most common necessaries, my compassion has given way to a degree of indignation, at observing, that, in consequence of the misrepresentations daily propagated through the medium of newspapers, these poor suffering creatures have been taught to believe, that a calamity, owing entirely to a severe dispensation of Providence, was occasioned by the avarice of farmers and forestallers. Upon such occasions, I have attempted to destroy the idea, by calling to their remembrance the long series of distressing weather

that

that had occasioned the deficiency of the crop. The uniform answer was, Look at the newspapers; see what fine crops they have in England, and elsewhere; and hear what is said about forestallers. It is in vain that I tell them, the authors of the paragraphs they lay so much stress upon, are, many of them, so grossly ignorant of country affairs, as to be unable to distinguish a horse from an ass, or a sheep from a hog; and that the editors, in order to fill up a corner, take any thing that is offered them; and, rather than want materials, will insert an old ballad, or an extract from Satan's Invisible World, or Pilgrim's Progress. My arguments, however, are for the most part unavailing, and very unequal to the task of combating the strong plea of hunger, sharpened by false and poisonous statements.

Last year, a season that will long be memorable in the annals of our history, at the commencement of the harvest, the newspapers announced a plentiful crop, and held out the most flattering prospects of cheap and wholesome Winter food. The squalid looks, and emaciated bodies, of thousands of half-famished human beings, by destroying the credit of these assertions, ought, in my humble opinion, to have served as a caveat to those concerned, or at least dictated a more prudent conduct in future. The scarcity of last crop, by its formidable appearance, became the subject of national inquiry, at a very early period of the season; and the labours of the Committee of the House of Commons, aided by the opinions of those who had the best opportunities of information, in every district throughout the kingdom, established, beyond dispute, that the scarcity and high price of grain were owing entirely to a deficiency in the crop, which, in a number of cases, was one-third short of an average, in others one-half, and, in not a few instances, it had entirely failed.

Amongst others, I had the honour of being applied to upon the subject, and was desired to state what I thought the probable causes of the scarcity, and the means of preventing a similar calamity in future? The only answer I could make, (and it was founded upon a perfect knowledge of the district in which I reside), was, that the scarcity was a real one, occasioned by the long-continued bad weather, during the *Seed-time*, *Summer*, and *Harvest*; an evil that lay beyond the power of man to prevent, and which could only be mitigated, in future, by the strictest attention to our national agriculture, and bringing an additional number of acres under

the plough. If the above conveyed a faithful statement of one of the richest and best cultivated counties in Scotland, and the one I mention holds the first rank, what distressing accounts must have been received from more distant and less fortunate districts; in many of which, to my certain knowledge, the crop was either entirely lost, or fit only for giving to horses or cattle. The notoriety of these facts puts the matter beyond a doubt, and, in the minds of well informed men, must outweigh the ignorant assertions (not to call them by a worse name) of newspaper scribblers.

It is, however, upon the latter part of a crop that has been the subject of so extensive and impartial an inquiry, and has been declared deficient by the most respectable authority, that the miserable sufferers, in place of being taught to bear their hardships with resignation, and to consider them as the chastisement of a Supreme Being, for some cause to us unknown, —have been industriously told, that there is no scarcity, and that their misery is owing entirely to the machinations of avaricious men. Let those persons, who have been so assiduous in circulating such statements, and who unquestionably have rendered the cup of misery still more bitter by their doctrines; I say, let them look around, and blush, when they view the exertions that have been made, to lessen the public calamity, by the very persons whom they have loaded with reproach, and exposed to the fury and resentment of an ignorant and suffering multitude. The farmers, whom they have falsely accused of hoarding up their grain, have, throughout Scotland, exhibited a degree of compassion and benevolence heretofore unequalled; having voluntarily come forward, inquired into, and relieved the wants of all around them. If the newspaper accusations are true, a statute of lunacy ought immediately to be applied for, against a body of men, who, at the same time that they are hoarding the necessaries of life, with a view to enhance their price, are gratuitously feeding the very people who are the principal consumers of these articles. The thing speaks for itself; and, were the subject any other than a matter of the highest importance to the peace and comfort of society, I should not employ argument against such wretched absurdity.

With regard to forestalling, regrating, &c. the instances in which they are practised are so few, as to be unworthy of notice, when applied to a general scarcity over a great kingdom. But, were they more numerous and extensive, we certainly have laws to repress them: and the observations upon the

the subject, in almost every newspaper, can be considered in no other light than a libel upon these laws. They have industriously sounded the alarm from one end of the island to the other; they have rode in *the whirlwind, and directed the storm* of all the tumults and outrages that have attended the present calamity. Let them recollect, that, upon another occasion, an occasion that will occupy a conspicuous place in the annals of our history, a poison, that threatened the very existence of the country, was also propagated through the same medium; I mean, the levelling or seditious principles with which the country lately teemed. From the beginning of that phrenzy, up to the time that the deputies were arrested at Edinburgh, their sentiments were propagated in the form of advertisements, and encouragement held out to the ignorant and turbulent, in all parts of the country, to unite in what was termed the common cause. The frequency of these advertisements, and the apparent impunity with which they were inserted, gave life to sedition, and rendered the principal actors bold: and it was not till the imprisonment of these men, and the whole kingdom had been set in a flame by their means, that the newspapers began to perceive they had done any thing that was either *morally* or *politically* wrong. You will pardon this digression, Gentlemen; but it appeared to me a case in point, and I could not omit taking notice of it. Indeed, I am the more induced to do so, as, should the present unfortunate circumstances continue, and another bad year or two be added to the past, the tempers of the lower ranks of society may be rendered so irritable, by a continual series of misrepresentation, as to produce scenes of anarchy and distress, beyond what any person can calculate upon.

It is not unworthy of notice, how far, in the heat of declamation, these warm friends of humanity forget a proper definition of terms, including, under the opprobrious names of forestaller, regrater, &c. every person who has any dealings in grain or provisions, without considering that many of the most extensive and populous districts in Scotland, and, indeed, in many other parts of the island, would have been absolutely famished, but for the exertions of corn-merchants. What would have been the situation of Edinburgh, Glasgow, nearly the whole of the west, and many parts of the north of Scotland, without their assistance. It is notorious that they would have been without bread for many months, had they depended solely upon the produce of their immediate neighbourhood.

I have always been a decided enemy to *monopoly* of every kind, particularly of the necessaries of life, and think the practice of buying up grain the produce of any district, and reselling it in the same place, at an advanced price, is highly censurable, and deserves punishment. Fortunately for the credit of the country, few such instances are met with: if any such do exist, the laws are adequate to their punishment. Very different is the idea that ought to be annexed to the character of the respectable corn-merchant, who either imports his grain from foreign countries, or purchases it in districts at home, where more is raised than the wants of the inhabitants require; and, by carrying it to other districts where it is scarce, circulates it equally, and establishes a balance over the whole country; preventing alike the distress arising from scarcity in one place, and the waste which seldom fails to attend plenty in another. If the regards of society are proportioned (as in all cases they ought to be) to the benefit derived from the exertions of meritorious individuals, the corn-merchant, such as I have described him, in place of being stigmatized in the manner he has lately been, is entitled to the gratitude of his fellow-citizens. In conclusion, I have only to add, that, when I buy a newspaper, the money is given for the articles of intelligence it contains, and not for the unfounded statements, or childish comments, that are tacked to the tail of most of them. I have no objection to the editor, with all his faculties, both of body and mind, lulled into harmony by his dinner and a few glasses of wine, warming his backside at the fire of his printing-office, and, with his eyes shut, fancying a fairy scene, where every thing breathes the most unbounded plenty. The idea is pleasing: let him indulge it. Would to God it could be realised in this country at present! But let him take care, in times so disastrous as these, not to publish such visions as real pictures. Like the Arabian Tales they will be believed only by weak or ill-informed minds: with those of another description, they will be scouted, and the author despised. Having never bought a boll of grain in my life, but for sowing or feeding my horses, and never sold any but the produce of my own land; and, having no connexion with, nor interest in, the transactions of any dealer in grain, I can with truth subscribe myself,

No Forestaller.

Sept. 12. 1800.

PART II.

REVIEW OF AGRICULTURAL PUBLICATIONS.

General View of the Agriculture of the County of Northumberland: with Observations on the Means of its Improvement. Drawn up for the Consideration of the Board of Agriculture. By J. BAILEY and G. CULLEY. 209 pages, 8vo. Sold by Mess. Robinson and G. Nicol, London; Bell, Newcastle; and Symington, Edinburgh.

[Continued from p. 318.]

WE have already given our opinion of five chapters of this useful Report, and proceed with pleasure to examine the remainder.

The sixth chapter treats upon that necessary branch of improvements, '*inclosures*.' In p. 65, we find the following valuable observations upon the most proper way of training up young hedges:

'It is a custom, in some parts, to clip young quicks every year; this makes the fence look neat and snug, but it checks their growth; and keeps them always weak in the stem, and, when they grow old, open at bottom; while those that are left to nature, get strong stems, and side branches, which, by interweaving one with another, make a thick and impenetrable hedge, and, if cut at proper intervals, (of nine or ten years) will always maintain its superiority over those that have been clipped from their first planting. In point of profit and of labour saved, there is no comparison; and, for beauty, we prefer nature, and think a luxuriant hawthorn, in full bloom, or loaden with its ripened fruit, is a more pleasing, enlivening, and gratifying object, than the stiff formal sameness produced by the shears of the gardener.'

In

In the chapter upon "arable land," we have a clear detail of the several articles of Northumberland tillage, from the fallowing of the ground till the rotation is finished. It would appear, that the practice of naked fallows is rather on the decline, and that drilled leguminous crops are now substituted in its place. While we are fully convinced that naked fallow can never, with advantage, be wholly laid aside upon the heavy soils, we cordially concur with the authors, that, with proper attention to cropping, the quantity may be very much reduced. But let them speak for themselves—

'Whether fallowing is or is not necessary, has been much agitated of late years; so much so, that the different partisans have obtained the appellation of '*fallowists*,' and '*antifallowists*.' It happens to be one of those subjects which can never be determined by reasoning, opinions, or bold assertions: *fair experiments* only can resolve it: and whatever be the results of such experiments, in any particular place, it may be justly concluded, they will be the same in similar soils, climates, and situations.

'Though we are diffident in giving a decided opinion upon so important a subject, yet from observations made on the above facts, we cannot help being inclined to think, that the quantity of naked fallow might be very much reduced, and, in another century, will probably be totally abolished, if no fortuitous circumstances arise, to check the exertions and spirit for improvement, which have been so prevalent of late years, and so generally diffused through this district.'

The information contained in the following paragraph, (p. 77.) has been amply corroborated by what we have practically experienced. Of last unfortunate crop, the smooth-chaffed wheats were 20l. per cent. superior to the other varieties, in respect of quantity and quality.

'The downy-chaffed wheats have shorter straw and are less liable to have the grain shaken out by winds, (the chaff embracing the grain more closely), than the smooth-chaffed tribes, which is a considerable advantage; but then we are apprehensive that this downiness makes them retain the dews and moisture upon the ear, much longer than the smooth-chaffed kinds, and probably renders them much more liable to be affected by those diseases, which give a dusky dark shade to the chaff, and a rusty cankering upon the straw: As we recollect few instances of smooth-chaffed, or red wheat, being

being troubled with the disease; of course, the downy-chaffed kinds are most proper for windy, open situations, and the smooth-chaffed to well-sheltered inclosed districts.'

In the account of Angus oats (p. 89.) we suspect that a mistake is committed. This variety is said to produce more straw than the common oat, which we have never found to be the case. So far from that, we judge that the latter, upon the same field, will exceed the other in bulk, at least one sixth. If the observation had applied to the grain, it would have been well-founded, as Angus oats are undoubtedly more prolific. With regard to the time of ripening, they appear now, from being naturalized to the climate, to come earlier to maturity, and in a more regular way, than when first introduced.

The drilling of beans is most judiciously recommended. Sowing this grain broad-cast, is certainly, in general seasons, attended with the most pernicious consequences. In fact, drilling and horse-hoeing beans, upon heavy soils, has been attended with equal advantages, as are produced by turnips upon the light ones.

We decidedly coincide with the authors, that potatoes can never be used with profit, in the feeding of cattle: a few of them, however, may be useful for carrying on stock in April and May, after the turnip crop is finished. Potatoes do not admit the land to be so well cleaned as turnips: They are planted too early for getting the ground sufficiently worked; and their after culture must be concluded at an early period of the season. We hardly ever saw a potato field completely cleaned: witness all the fields in the vicinity of great towns, where potatoes are the chief fallow crop.

A curious and interesting history of drilled turnips is given, (p. 106.) which is too long to be inserted here, but shall afterwards be taken in by way of "Extract." It appears that, when originally introduced into Northumberland, they were sown broadcast; and that the first person who sowed them, having much to do, was obliged to *ride* and *sow*, that he might dispatch the greater quantity!

We are glad to notice, (p. 133.), that "the commons in this country, capable of being converted into profitable tillage, are now very trifling, the greater part having been inclosed within the last thirty years." The advantages attending this proceeding, are detailed in the following manner:

"*The*

" *The advantages* arising from inclosing of commons, in respect to the *improvement of stock*, is obvious, when it is considered that, while in a state of common, every one turns on what he pleases, and there is generally double the quantity of stock that there ought to be: the consequence is, they make no improvement; *they barely exist.* Should an enlightened breeder wish to improve his sheep, how is he to effect it, while his ewes mix promiscuously with his neighbour's flocks? If he had the best tup in the kingdom, can he be sure that one of his ewes would be tupped by him, while there are probably not less than a score of his neighbour's to contest the female with him? On the other hand, if the common were enclosed, every one would stint with that species of stock for which his allotment was best adapted, and in such numbers as would insure profit. When he can confine his ewes within his own inclosure, he can make whatever experiment he pleases, by putting a few, or many ewes, to any particular tup, without any fear or apprehensions of having a spurious breed, by the interference of his neighbour's. He is also enabled to keep his flock from many disorders. Few commons but have some tracts of land liable to the rot. How are they to be prevented from depasturing on it? Or, if the scab, or other infectious disorders, have taken place amongst any flock on the common, how is he to avoid it?"

The authors are friendly to paring and burning, and their opinion upon the subject (p. 137.) is so conformable to our own, that we shall give the whole section. It is not the operation itself which destroys the soil, but the injudicious cropping carried on afterwards. The like injury may be done by lime, which we have seen practically exemplified.

" Paring and burning is not much practised in the eastern and northern parts of the county; in the middle and southern parts it is most prevalent; but, even there, it is confined to old swards, and course, rough, rushy, and heathy lands. For the first breaking up of such ground it is certainly very convenient, and preferable to any other mode we have ever seen; but though we are fully convinced of its beneficial effects in such situations, yet we have our doubts whether it could be used with advantage upon lands that have lain a few years in grass, and that would produce good crops of grain *immediately on being ploughed out*, which is not the case with coarse, rough, heathy lands, or even very old swards on rich, fertile soils; it being found that crops on the latter, are frequently very much injured by " *leaping*," for two or three years; which paring

paring and burning entirely obviate, and insure full crops to the farmer, who need not be under any apprehension of his soil being ruined by it, provided he pursues the following course: 1. Turnips 2. Oats. 3. Fallow, well lined for turnips. 4. Barley, sown up with clover and grass seeds, and depastured with sheep for three or four years; and afterwards (if not intended to lie in grass) continue it in the rotation mentioned p. 73. It is the *injudicious cropping*, more than the ill effects derived from paring and burning, that has been the chief cause of bringing such an odium on this practice, which is certainly an excellent one in *some situations*, and *properly conducted*; but, like the fermented juice of the grape, may be too often repeated, and improperly applied.

"The popular clamour against this practice, "that it *destroys the soil*," we can by no means admit; and are inclined to believe, that not a single atom of soil is abstracted, though the bulk of the sod or turf be diminished. This arises from the burning of the roots or vegetable substances, which, by this process, afford a considerable portion of alkaline salts, phlogistic or carbonic matter, and probably other principles friendly to vegetation; as we find those ashes produce abundant crops of turnips, which fatten stock much quicker than those after any other dressing or manure we have ever seen; and the succeeding crops of corn are so very luxuriant, as to tempt the *injudicious cultivator* to pursue it too far; who, for the sake of a temporary gain, may be said to rip it up, as the boy did with his goose that laid golden eggs."

We apprehend that too much is said, p. 139, viz. "That every exertion of ingenuity is practised to raise a large portion of farm-yard dung." *Query*, Are the corn-crops cut low? Unless this is attended to, one fifth, in some cases more, of the means of making manure, is effectually lost. The conduct of the Cheviot farmers, in allowing their dung to be taken away by the floods, deserves severe reprobation.

We entirely agree with the opinion given, p. 143, "That upon some soils, the application of lime, in considerable quantities, is absolutely necessary, in order to bring them to their most fertile state, and to prepare them for the action of other manures." We have often, however, viewed the Northumberland lime-husbandry, as little better than giving the land a snuff; and we do not wonder, "that many intelligent farmers begin to doubt of its efficacy, and the propriety of continuing to lay it upon their old tillage-lands." In such situations, it is only throwing away money unnecessarily,

cessarily, to expend it upon the purchase of lime. Refresh the land with grass, and the operation may be profitably repeated.

The account in chap. 13. of the wild cattle belonging to Lord Tankerville, is entertaining.

" *The wild cattle*—are only found in Chillingham Park, belonging to the Earl of Tankerville; and as it is probable they are the only remains of the true and genuine breed of that species of cattle, we shall be more particular in our description.

" There colour is invariably white, muzzle black; the whole of the inside of the ear, and about one third of the outside from the tip downwards, red; horns white, with black tips, very fine, and bent upwards. Some of the bulls have a thin upright mane, about an inch and a half, or two inches long. The weight of the oxen is from 35 to 45 stone, and the cows from 25 to 35 stone the four quarters, 14 lb. to the stone. The beef is finely marbled, and of excellent flavour.

" From the nature of their pasture, and the frequent agitation they are put into, by the curiosity of strangers, it cannot be expected they should get very fat: yet the six years old oxen are generally very good beef; from whence it may be fairly supposed, that in proper situations, they would feed well.

" At the first appearance of any person, they set off at full speed, and gallop to a considerable distance; when they make a wheel round, and come boldly up again, tossing their heads in a menacing manner. On a sudden, they make a full stop, at the distance of forty or fifty yards, looking wildly at the object of their surprise; but, upon the least motion being made, they again turn round, and gallop off with equal speed; but, forming a shorter circle, and returning with a bolder and more threatening aspect, they approach much nearer; when they make another stand, and again gallop off. This they do several times, shortening their distance, and advancing nearer, till they come within a few yards, when most people think it prudent to leave them.

" The mode of killing them was, perhaps, the only modern remains of the grandeur of ancient hunting. On notice being given, that a wild bull would be killed upon a certain day, the inhabitants of the neighbourhood came, in great numbers, both horse and foot. The horsemen rode off the bull from the rest of the herd, until he stood at bay, when a marksman dismounted and shot. At some of these huntings, twenty or thirty shots have been fired, before he was subdued. On such occasions, the bleeding victim grew desperately furious, from the smarting of his wounds, and the shouting of savage joy that were echoing from every side. From the number of accidents that happened

ed, this dangerous mode has been seldom practised of late years; the park-keeper alone generally shooting them with a rifled gun, at one shot.

'When the cows calve, they hide their calves, for a week or ten days, in some sequestered situation, and go and suckle them two or three times a-day. If any person come near the calves, they clap their heads close to the ground, and lie like a hare in form, to hide themselves. This is a proof of their native wildness; and is corroborated by the following circumstance, that happened to the writer of this narrative, who found a hidden calf, two days old, very lean, and very weak. On stroking its head, it got up, pawed two or three times like an old bull, bellowed very loud, retired a few steps, and bolted at his legs with all its force. It then began to paw again, bellowed, stepped back, and bolted as before; but knowing its intention, and stepping aside, it missed me, fell, and was so very weak that it could not rise, though it made several efforts: But it had done enough; the whole herd were alarmed; and coming to its rescue, obliged me to retire: for the dams will allow no person to touch their calves, without attacking them with impetuous ferocity.

"When any one happens to be wounded, or grown weak and feeble through age and sickness, the rest of the herd set upon it, and gore it to death."

A very full account of the sheep husbandry of the county is given, p. 153. *et seq.* They are classed under three distinct heads; viz. the *Cheviot*, the *Heath sheep*, and the *Long-woolled breed*. Drawings of a ram of each breed are presented; but we have been informed that some of them are not correct. In speaking of the heath sheep, it is said—

"The breeders of this kind of sheep on the south-west corner of the county, are very confident that they are a *much hardier sheep* than the Cheviot breed; and, upon their high-exposed heathy mountains where there is *very little green herbage*, much more profitable; while the Cheviot farmers assert, that theirs are equally hardy, and that the greater value of the fleece gives them a decided superiority. We have before stated, that the fineness of wool is not a proper criterion by which the merits of a breed of sheep are to be determined. It can only be done by fair experiment, in which all the circumstances of the case are included. But we do not find that this has ever been done by either party; and though it is only opinion against opinion, yet both parties are so positive, that they are ready to quarrel with any person who happens to express an opinion of his own.

We shall therefore content ourselves with stating, that the question can only be properly decided by a parcel of each kind of ewes (suppose 100) being depastured and kept in every respect alike, upon some of those high, exposed situations, the height of which is much more elevated, and the herbage coarser, than the Cheviot pastures, and almost totally covered with *heath or heather (erica vulgaris)*; and, at the end of *five, six, or seven years*, that breed which has brought the greatest number of sheep to market, and made the most profit, will deservedly be deemed the *hardiest*, *best*, and *most eligible* for such situations.

" Until some experiment of this kind determine the matter, we hope we shall not give offence to either party by stating, that we have seen the heath sheep bred with advantage upon higher and coarser pastures than *Common Burn*, or those other kinds around Cheviot; and that it may probably turn out, that each breed is particularly adapted to particular situations; the one to *coarse, exposed mountains*, where the luxury of green herbage is thinly scattered, or rarely to be found; the other, to *hilly pastures*, where considerable portions of verdant surface predominate, such as characterise the pastoral districts round Cheviot."

The practice of milking ewes is very justly censured, and we are happy to learn that this unprofitable custom is going fast into disuse.

The comparative statement betwixt horses and oxen, for the purpose of the draught, is given with so much accuracy, that we cannot refrain from extracting the whole of it. If oxen were invariably employed in farm-labour, it is evident that they would occasion a famine in the country, instead of rendering provisions cheap, as speculative men have idly supposed.

A comparative Statement between Horses *and* Oxen, *for the purpose of the Draught.*

" By way of preliminary, it will be necessary to admit as data, that a horse, which eats 70 bushels of oats per year, will not consume of other food so much as an ox that gets no corn *; but, in the following estimate, we shall allow horses to eat as much

* This is deduced from the following experiments.

Three

much as oxen, as the difference is not yet sufficiently ascertained.

"That the oxen are yoked at three years old, and are worked till six; and for the first year require eight to do the work of two horses; but, after having been worked a year, and become tractable and stronger, six are equal to two horses, either by being yoked three at a time, or two, and driven by the holder with cords; of course, the expence of a driver may be estimated to be saved for one half the year.

"That the expences of a ploughman, the plough, and other articles that are the same in both teams, need not be taken into the account.

"And that oxen, to work regularly through the year, cannot work more than half a day at a time.

Expence of an ox per ann.

	L.	s.	d.	L.	s.	d.
Summering,—Grass 2 acres, at 20s. per acre -				2	0	0
Wintering,—on straw and turnips	2	0	0			
but if on hay -	4	0	0			
The average is * - - -				3	0	0
Carry over				L. 5	0	0

Three working horses, about 15½ hands high, eat in 14 days 96 stones of hay, which is for each horse, at the rate of 16 stones a-week, with an allowance of oats, 12 gallons per week.

Mr Thomson's (of Chillingham Barns) 18 horses in 12 days eat 430 stones of hay; which is 14 stones per week each horse: allowance of oats, 16 gallons per week.

Mr Atkinson's, of Yevering, eat, per week, 13 stones of hay, 2 bushels of potatoes, and 16 gallons of oats.

Mr Jobson's of Newtoun, five years old working oxen, with a full allowance of hay, had, each ox, 6 quarts of oats per day.

In 15 days, 4 oxen eat 164 stones 7 lb. of hay, which is after the rate, for each ox, of hay 19¼ stones per week.

of oats 10½ gallons ditto.

Three days after, the same oxen were put to hay only; and in 7 days eat 79 stones 10 lb. or 20 stones each ox per week, which is only ¾ stone more than when they got 10½ gallons of corn in the same time. This is a singular circumstance, and deserving of further investigation.

An unworked ox, 3½ years old, was put to good old meadow-hay, the 29th of November, and eat 49 stones in 21 days; or, per week, 16 stones 5 lb.

An idle horse (15½ hands high) eat of the same hay, 20 stones in 10 days, or, per week, 14 stones—had no corn.

* A great portion of the soil of this county is improper for turnips. In those districts hay is given, instead of turnips; for which reason we have taken the average.

	L.	s.	d.
Brought over	5	0	0
Interest at 5 per cent. for price of the ox	0	10	0
Harness, shoeing, &c.	0	15	0
	6	5	0
Deduct for the increased value of an ox for 1 year	1	0	0
Gives the expence per ann. of an ox for the team	5	5	0
And the expence of 6 oxen	31	10	0
To which must be added the expence of a driver for half a year	3	10	0
Total expence of a team of 6 oxen	35	0	0

An eight-ox team.

The expence of an ox per ann. being	5	5	0
			8
That of eight will be	42	0	0
To which add the expence of a driver	8	0	0
Gives the expence per ann. of an eight-ox team	50	0	0
Therefore the expence of a team of oxen for the first year will be	50	0	0
Ditto the second year	35	0	0
Ditto the third year	35	0	0
Divided by 3)	120	0	0
Gives the average expence per ann. of an ox-team, from 3 to 6 years old	40	0	0

Expence of a horse per ann.

Summering—Grass 2 acres, at 20s. per acre	2	0	0
Wintering—Straw 13 weeks, at 9d. per week	0	10	0
Hay 16 ditto 1½ tons, at 2l. per ton	3	0	0
Corn (for a year), 70 bushels of oats, at 2s. per bushel	7	0	0
Shoeing and harness	1	0	0
Carry over	L. 13	10	0

	L.	s.	d.
Brought over	13	10	0
Annuity to pay off 25l. in 16 years, the purchase value of the horse at four years old *	2	5	0
Expence of a horse per ann.	15	15	0
Ditto of a two-horse team	31	10	0

If a three-horse team be used, the account will stand thus :—

	L.	s.	d.
The expence of a horse per ann. being	15	15	0
			3
That of three will be	47	5	0
To which add the expence of a driver	8	0	0
Gives the expence of a three-horse team	55	5	0

" If the comparison be made with the horse-team of many of the midland counties, where they use *five horses, yoked one before another in one plough*, the account will stand thus :—

	L.	s.	d.
The expence of one horse per ann. being	15	15	0
			5
That of five will be	78	15	0
To which add the expence of a man to drive	18	0	0
The expence of a team of 5 horses will be	96	15	0
Ditto of 3 ditto	55	5	0
Ditto of 2 ditto	31	10	0
Ditto of 8 oxen	50	0	0
The average expence of an ox-team, from three to six years old, that will do the same quantity of work as two horses	40	0	0

" The conclusions to be drawn from the above statement are so obvious, as to need little elucidation. But we cannot help remarking how strong the force of prejudice must be, to continue the use of five horses, and heavy, clumsy, unwieldy *wheel-ploughs*, where a single *swing-plough*, and two horses yoked double, and driven by the holder, would do the same quantity of work, equally well, and at one-third the expence!

* This is calculated on the supposition, that a horse bought at four years old will work sixteen years; and admitting his price to be 25l., then the question will be, to find what annuity will pay off 25l. in sixteen years, allowing compound interest at 5 per cent., which, by the rules laid down by the writers on algebra, will be 2l. 5s.

" But before any proper conclusions can be drawn, whether *ox-teams* or *horses* are the most eligible, it will be necessary to consider whether the quantity of land employed in supporting those animals, be used in the most profitable mode to the community, as well as the occupier.

" With the latter, the first question for consideration is, Whether eight oxen used in the team, or in grazing, will pay him the most money?

" Suppose eight oxen at *three years old*, were put to the plough, and plough six acres per week, which, at 3s. 4d.* per acre, is 20s.; and if they work forty-eight weeks in a year, then their whole earnings (after deducting 6l. for expences of harness, shoeing, &c.) will be 42l.; but if they plough only *five acres per week*, (which is probably nearer the truth) then their whole earnings will be only 34l.

" The same oxen put to graze at the same money, should improve in value 5l. 5s. each, in the first case, and 4l. 5s. in the latter; but we are inclined to believe, there are few situations, if the cattle are of a good quick-feeding kind, where they would not pay *considerably more*.

" In respect to the community, the account will be nearly as follows:

" From the above statements, we find that an ox for summering and wintering, requires - - $3\frac{1}{2}$ acres;

Therefore a six-ox team will require	-	— 21	ditto
And two horses for grass and hay per ann. require		7	ditto
For corn and straw - - -		4	ditto
Land necessary for keeping two horses per ann.		— 11	ditto
The difference in the quantity of land required for a team of oxen more than horses - - -	-	10	acres.

" Hence it appears, that a team of six oxen requires ten acres more land to maintain them than a team of two horses, which will do the same work; and, of course, the produce which might be derived from these ten acres is lost to the community. Suppose it to be one half in grass, the other half in tillage, then we shall have

5 acres of clover or grass.
$1\frac{2}{3}$ ditto of oats.
$1\frac{2}{3}$ ditto of turnips, or fallow.
$1\frac{2}{3}$ ditto of wheat.

" It

* If to this 3s. 4d. be added 1s. 8d., the wages for the ploughman and driver it will make 5s., the usual price for ploughing an acre in this district.

" It would then send to market yearly, at the lowest computation,

$7\frac{1}{2}$ cwt. of beef.
8 quarters of oats.
And 5 ditto of wheat.

" From this view of the subject, it appears, that if oxen were universally used for the draught, in the room of horses, there would be a considerable defalcation in the supply of the markets both in corn and animal food.* And the loss to the farmer, would be the profit derived from the produce; which, by the usual mode of allowing one-third for the farmer's profit, would, in this case, be about 10l."

The above is the most correct statement upon this important subject that we have seen. The advocates for oxen are constantly calling for facts! Here they are to their hand. Indeed, we have always considered the general practice of laying oxen aside, where husbandry was actively carried on, as the strongest proof of their inutility.

The obstacles to improvements are stated to be, " Letting no leases, or leases for five or seven years." The loss which the country sustains from such pernicious conduct, is clearly elucidated. The payment of tithes in kind, is likewise brought forward as an obstacle to the advancement of agriculture; and it affords us great satisfaction to find, that the sentiments we have constantly maintained upon this branch of political economy, are so ably supported by such eminent and judicious agriculturists. We have long considered it as an axiom, That the waste lands cannot be cultivated, unless this ancient, but pernicious burden is previously commuted. This is in fact done under every inclosure-bill which is passed into a law, as an allotment in lieu of tithe is set apart for the impropriator. Where tithe is regularly drawn, it is not simply 10l. per

 cent.

* In this county, it is estimated, that there are capable of cultivation 800,000 acres; and allowing one-third of this to be in tillage, that is, 266,666 acres, and that every 50 acres in tillage will require a team to manage it properly; of course, there will be at least 5333 teams; but, for the sake of round numbers, call it 5000 teams:

	£.
Then 5000 × $7\frac{1}{2}$ cwts. beef = 37,500 cwts. of beef, at 30s. -	56,250
5000 × 8 qrs. oats = 40,000 qrs. of oats, at 16s. -	32,000
5000 × 5 qrs. wheat = 25,000 qrs. of wheat, at 40s. -	50,000
	L. 138,250

—the value in provisions that would be lost to this country yearly, if horse-teams were abolished, and oxen used in their stead.

cent. upon the product of the ground, *but* 10*l. per cent. upon the tenant's capital stock*, because this capital is all laid out in the raising of the produce. Instead of being 10l. per cent. upon the rent, as very mistakenly supposed by some people, it may amount to ten times more, where the farm is possessed under a lucrative lease, or in the hands of a farmer who is an adept at his business.

Under the section of weights and measures, p. 194, it is said—

"The Board of Agriculture could not do the public a greater service, than by bringing forward a regulation of weights and measures. One weight and one measure, derived from the same root, and increasing or decreasing in a ten-fold ratio, would introduce such simplicity, ease, and perspicuity, into all transactions of business, (where calculations are necessary) as would prevent the numberless mistakes and errors which are daily happening.

"Preparations for remedying this great inconvenience, have been made at different times; and we believe there are sufficient materials for perfecting the measure, whenever it is thought proper to bring it forward.

A very animated conclusion is given; but we are sorry that want of room prevents us from inserting it. In this branch, the means of improvement are brought under one point of view; and we can just mention them. They are, *drilling of peas and beans—watering of meadows—draining—planting.*—An *increased attention* to the *live stock* of the country.—*Single-horse carts—public farms*, "where youth might be instructed in agriculture, and experienced farmers might visit with advantage."

Upon the whole, it is but justice to the authors of this Report to say, that while it contains a large fund of sound practical information, it is written with spirit and perspicuity, and cannot fail to prove highly interesting to those who search after a detailed account of British husbandry. We have received much pleasure in perusing such an intelligent work, and ardently wish that every report presented to the Agricultural Board, had been executed upon the same liberal and scientific principles.

PART

PART III.

EXTRACTS FROM AGRICULTURAL PUBLICATIONS.

From the Agricultural Survey of the West Riding of Yorkshire.

FALLOWING DEFENDED.

WHETHER Summer-fallow is necessary or unnecessary?—is a question lately agitated; and, in a respectable work, (the Survey of Norfolk), an attempt has been made to explode this practice, which has long been considered as a most beneficial improvement. The agriculture of Britain being materially interested in the issue of this question, the following answers to the Norfolk surveyor are submitted to the public.

To keep his land clean, will always be a principal object with every good farmer; for, if this be neglected, in place of carrying rich crops of corn or grass, the ground will be exhausted by crops of weeds. Where land is foul, every operation of husbandry must be proportionally non-effective, and even the manures applied will, in a great measure, be lost.

If the season of the year, and the state of the weather, when the ground is ploughed preparatory to receiving the seed, be duly considered, it will be found, that, at that time, it can neither be properly divided by the action of the plough, nor can root-weeds, or annual weeds, be then extirpated. Hence arises the necessity of working it in Summer, when the weather is favourable for the purposes of ploughing, and when root-weeds may be dragged to the surface. It is only at that time the full advantages of ploughing are attainable; for Summer-fallow may, with propriety, be styled ploughing in perfection.

The

The necessity of Summer-fallow depends greatly upon the nature and quality of the soil; as, upon some soils, a repetition of this practice is seldomer required than upon others. Wherever the soil is incumbent upon clay or till, it is more disposed to get foul, than when incumbent upon a dry gravelly bottom: besides, wet soils, from being ploughed in Winter, contract a stiffness, which lessens the pasture of artificial plants, and prevents them from receiving sufficient nourishment. When land of a dry gravelly quality gets foul, it may be easily cleaned, without a plain Summer-fallow; as crops, such as turnips, &c. may be substituted in its place, which, when drilled at proper intervals, admit of being ploughed as often as necessary; whereas wet soils, which are naturally unfit for carrying such crops, must be cleaned and brought into good order by frequent ploughings and harrowings, during the Summer months.

It is from neglecting to make these distinctions, that the erroneous system laid down by Mr Kent, the Norfolk surveyor, evidently proceeds.

The county of Norfolk generally consists of dry sand, or of rich sandy loam; and, agreeably to the above principles, Summer-fallow may, in that district, be considered as unnecessary. If Mr Kent had confined his strictures to the husbandry of Norfolk, no objection could reasonably have been urged against them; but, when he condemns Summer-fallow altogether, he strikes at the agriculture of Britain in a most material point.

The substance of Mr Kent's arguments against fallow, may be comprised under four heads:

1*st*, Nature does not require any pause or rest; and the earth was evidently designed to yield a regular uninterrupted produce.

2*dly*, As the productive quality of the earth never ceases, if corn is not sown, weeds will be produced; therefore, it is our business to expel the unproductive plant, and to introduce others that are beneficial.

3*dly*, That the idea of leaving land to rest, is ridiculous; for by keeping it clean, and by a judicious intermixture of crops, it may be managed like a garden, and sown from one generation to another.

4*thly*, That the fallows in England exhibit nothing but a conflict between the farmer and his weeds, in which the latter generally prevail; for they are only half-stifled, and never effectually killed.

The

The most of these arguments may be granted, and yet the utility, nay the necessity of Summer-fallow, be consistently maintained.

It is already acknowledged, that it is only upon wet soils, or, in other words, upon land unfit for the turnip-husbandry, a plain Summer-fallow is necessary; and this, we suppose, includes three-fourths of the island. The utility of Summer-fallow upon such soils, is not contended for because nature requires a pause or rest to invigorate her to carry fresh crops, but solely because it is impossible to keep them clean, without this auxiliary assistance. To speak of following nature in farming, is mere sound; for, if we were to imitate nature, we would not cultivate land at all. Nature is often improved by art; and fallowing is the means employed for removing a host of enemies, which prevent her from being fertile and productive.

As a field filled with root-weeds, must be in a state of greater exhaustion, than if it carried a heavy crop of corn; so, the productive quality of the earth must necessarily decrease, in proportion to the quantity of weeds it brings forth. But, because corn is not sown, it does not follow that weeds of any kind should be suffered to grow. The object of allowing the ground to remain a year under fallow, is to afford time and opportunity for expelling the unproductive plant, and to prepare it for the reception of others which are beneficial.

The most judicious intermixture of crops upon clay soils, will not preclude the necessity of Summer-fallow, although it will go a great way to prevent a frequent repetition of it. An eight-course shift, such as, fallow, wheat, beans drilled and horse-hoed, barley, grass-seeds, oats, beans, and wheat, is as much as can be recommended; and it is only upon rich clay, or deep loam, where such an extensive rotation is admissible. A shift of this kind, when dung is applied twice in the course of it, will pay the farmer more handsomely than the most judicious intermixture of crops, where fallowing is neglected.

Again, no rules drawn from garden practice will apply to operations carried on in the field; the soils are generally very different; and any comparison that can be made, must be with those rich sandy soils, upon which we have allowed fallowing to be unnecessary. The crops in the garden are reaped at so many different times, and often so early in the season, that opportunity is always gained for working the ground

in

in the completest manner; while the immense difference betwixt working with the plough and the spade, renders every comparison ridiculous.

A fallow field, which exhibits a conflict betwixt the farmer and his weeds, does not deserve that appellation; for the intention of the fallow is to extirpate these weeds. We are inclined to think, that the shocking situation of many English fallows may be attributed to the feeding and folding them with sheep. The farmer, from being obliged, by the conditions of his lease, or the rules of common-field management, to fallow every third or fourth year, is tempted to draw something from them when in this unproductive state, and, to gratify his avarice in the first instance, sacrifices the good husbandry which it is his ultimate interest to practise. A well managed fallow should be wrought as early in the season as possible, and continually turned over where the least particle of quickens appears. It is no argument against the utility of fallows, that they are often managed in a different way; this goes only against the impropriety of the management, but does not militate against the practice itself.

Upon the whole, the necessity of Summer-fallow turns upon this single point:—Can wet lands be advantageously employed in raising turnips or cabbages? a question which the *practical farmer*, who is sufficiently acquainted with the nature of such soils, and the immense labour required to bring them into proper tilth, will have no difficulty to answer in the negative. It is not disputed but that turnips and cabbages will grow upon these soils; but the question is, Whether the extraordinary labour they require, and the damage sustained by the ground, during the consumption or carrying off the crops, will not exceed the value of the produce? Does Mr Kent mean to recommend the turnip-husbandry under such circumstances? If he does, the recommendation furnishes a presumption that he is unacquainted with the cultivation of wet lands. If he does not, how is the ground to be kept clean, and enabled to yield a regular uninterrupted produce?

Nothing that is said in defence of fallow, is meant in vindication of the absurd system of taking only two crops to one fallow, as practised upon many English common-fields. It is only meant to show that clay soils, and every soil incumbent upon a wet bottom, cannot be kept clean, without the assistance of this radical and ancient practice. How often it should be used, must in a great measure be left to the discretion

discretion of the farmer, who will repeat it when necessary, if he knows his own interest. We shall conclude our defence of fallow, with an extract taken from p. 192. of the Survey alluded to. "*It is highly proper to be careful against adopting the visionary recommendations of modern theorists, who, upon hypotheses of their own, hold up wild systems of delusion, which are apt to mislead the credulous and do great injury.*"

Account of the Rev. Mr ADAM DICKSON, *extracted from the Introduction to the "Husbandry of the Ancients."*

MR DICKSON was a son of the late Reverend Mr Andrew Dickson, minister of Aberlady, in the county of East Lothian. He had a liberal education at the University of Edinburgh; and, having a very promising genius for learning, was always designed for the church. His father, however, having a large farm, he early turned his thoughts to agriculture; and, in his youth, passing some part of his time with the farmers of that opulent county, who are many of them not unfit to converse with men of letters, he, from them, as well as from his own observation, acquired the exact knowledge of facts, and of the practice of husbandry. Being a man of a very lively apprehension, of an ardent mind, and of a clear and sound judgment, he soon became an adept in any branch of science to which he applied.

Mr Dickson was ordained minister of Dunse, in the shire of Berwick, in the year 1750. As his settlement had been delayed for a considerable time, on account of a law-suit about the legality of the presentation, an opposition to him was stirred up in the parish; but such was the ability, good sense, and engaging temper of Mr Dickson, and such the candour and generosity of his conduct, that his most sanguine opponents very soon became his greatest friends.

Our author resided for twenty years in Berwickshire, where improvements in agriculture having been much more recent, and the difficulties to be surmounted much greater than in East Lothian, he had occasion there to observe the most spirited exertions by the cultivators of land. This change of situation enlarged his views, and extended his knowledge, on the subject of his favourite pursuit.

In

In the year 1770, Mr Dickson returned to his native county, having been translated from Dunse to Whittingham, in East Lothian, where he lived but a few years: he was killed by a fall from his horse, on the 25th of March 1776. No man could be more universally regretted among the circle of his acquaintance, than he was; not merely on account of his respectable abilities as a clergyman and a scholar, but still more on account of the unbounded benevolence of his heart, and the peculiar frankness and promptitude with which he gave his assistance, in advice, or in credit and support, to every person who had the smallest title to ask him.

It was with no small degree of judgment, that Mr Dickson had early selected to himself a corner of literature, for which the habits of his life had particularly qualified him, and in which he was not likely to interfere with any of his companions, who started at the same time, for the fame derived from writing well. He had observed with regret, that the books of husbandry, that had been published in England, were ill calculated for the soil and climate of Scotland; and likewise, that many of them consisted chiefly of uncertain speculations on theories, not well supported by the history of facts. He was therefore determined to compose a Treatise of Agriculture, on a plan that should obviate these objections. The first volume of this Treatise was published in the year 1764, and the second some years afterwards; and has ever since been held, not only to be the book best adapted to the practice of the Scotish farmer, but, upon the whole, one of the most judicious and practical treatises on the subject that has ever been published in Britain.

The Husbandry of the Ancients was the produce of Mr Dickson's maturer years, and, as he confesses himself in the preface, cost him a very great degree of application and labour. The public will judge of the execution. To the editor, it appears to do much honour to the author, and to be a very valuable present to all who are conversant in the first and most useful of all the necessary arts. Farmers, in general, are entirely ignorant of the language in which the books of ancient husbandry are written; and there are but few of those lovers of the art, who are masters of the language, that will take the trouble to select out of the ancient authors, in some of which there is no small degree of obscurity, all the experiments and rules that suit the modern practice.

This they will find done to their hands by the author, who has collected, under proper heads, from the ancient writers, whatever

whatever is material to the moderns; has compared the facts and rules together; and has set them in one view before his readers, both in a Translation, and in the original Latin. His perfect knowledge of the subject, has enabled him to clear up many difficulties, which the learned commentators on the *Rei Rusticæ Scriptores*, being entirely ignorant of husbandry, had rendered more obscure; while his skill in modern agriculture enabled him to make a judicious comparison between that and the practice of the ancients.

It appears from the author's preface, which follows, that his work was ready for the press before his death; though, by the copy of a letter in the editor's hands, he had not then determined whether he would treat with a bookseller, or publish it by subscription. But although the work was completed for the press, the candid reader may probably find defects and inaccuracies in it, that would have been supplied or corrected, had the author lived to superintend the press. He will also reflect, that the book was written fully twelve years ago, and therefore will make an allowance for there being no notice taken in it of improvements or discoveries in husbandry, that may have been made since that time.

The manuscript was given to the editor a few years ago, by a daughter of the author's, who survived him, with a recommendation to do with it what he thought best, for the memory of her deceased father, and his own friend. After revising it with care, the editor put it into the hands of the noble Lord to whom it is inscribed; with whose approbation, and under whose patronage, he ventured to offer it to the public, in the shape in which it now appears, with little doubt of its meeting with a favourable reception.

FOR THE FARMER'S MAGAZINE.

AGRICULTURAL TABLE OF SCOTLAND,

Extracted by Permission,

From Mr ROBERTSON'S Statistical Table.

I. Square miles of surface.
II. Population per square mile.
III. Rent per Scotish acre in shillings and pence.
IV. Proportion in 100 parts of arable land.
V. Ditto of moorish land, occasionally cultivated as meadows.
VI. Ditto of hills, &c. altogether unfit for tillage.

COUNTIES, &c.	I.	II.	III.		IV.	V.	VI.
			s.	d.			
Aberdeen	1890	65	2	9¼	16	46	38
Ayr	1034	73	6	3	24	36	40
Argyle-mainland	2130	24	1	7½	6	12	82
Argyle-islands	794	31	1	2¾	6	12	82
Argyle-shire	2924	26	1	6	6	12	82
Banff	750	51	2	3½	15	40	45
Berwick	480	64	9	8½	27	27	46
Bute-isle	40	119	5	4½	25	25	50
Arran	184	32	0	9	5	20	75
Bute-shire	224	47	1	7¼	9	21	70
Caithness	690	36	1	1½	8	12	80
Clackmannan	48	182	11	7	40	35	25
Cromarty	25	211	7	5½	30	34	36
Dumfries	1344	40	3	2½	15	30	55
Dumbarton	245	75	5	5	25	25	50
Edinburgh	360	340	16	6	32	32	36
Elgin	575	48	2	10	20	36	44
Fife	476	183	14	4	32	48	20
Forfar	928	98	5	1¾	30	25	45
Haddington	300	96	17	4½	64	16	20

AGRICULTURAL TABLE—continued.

Counties, &c.	I.	II.	III.	IV.	V.	VI.
Inverness-mainland . . .	2894	16¾	0s. 9d.	4	6	90
Skye-island	792	18⅓	0 5¼	4	6	90
Uists, Harris, Barra, &c.	616	17⅓	0 4¾	4	6	90
Inverness-shire	4302	17	0 7¾	4	6	90
Kincardine	380	70	4 0	20	30	50
Kinross	78	68	6 4¾	25	50	25
Kirkcudbright	864	31	4 4⅓	12	24	64
Lanark	870	144	5 8⅓	15	40	45
Linlithgow	112	156	15 6¼	40	40	20
Nairn	152	40	2 0¾	20	30	50
Orkney-isles	350	46	1 10⅓	10	14	76
Shetland-isles	1250	16	0 2⅔	4	6	90
Orkney-shire	1600	27	0 5⅓	5¼	7¾	87
Peebles	294	27	4 0	6	18	76
Perth	2374	56	3 9¾	16	20	64
Renfrew	246	296	10 2¾	20	40	40
Ross-mainland	2280	18	0 7⅓	5	7	88
Lewis-isle	649	13	0 3	2	6	92
Ross-shire	2929	17	0 6⅓	4¼	6	89
Roxburgh	738	41	5 5¼	18	27	55
Selkirk	260	16	4 0	5	15	80
Stirling	704	66	4 10	12	36	52
Sutherland	1894	12	0 2⅔	2	3	95
Wigton	469	45	4 5¾	15	25	60
Fresh-water Lakes	569					
General Result	31,168	50	3 1¾	12¼	20¾	67

TABLE.

Showing the difference betwixt the Scots Standard Linlithgow Boll, and the Wheat and Barley Measures used in several Counties in Scotland.

	Linlithgow Boll.					
	Wheat.			Barley.		
100 Bolls of	B.	F.	100 pts.	B.	F.	100 pts.
Linlithgow	100	0	0	100	0	0
Aberdeen	122	1	41	109	2	70
Argyle, *Inver*	116	1	1	107	1	3
Argyle, *Camp*				128	2	83
Ayr	97	3	46	134	0	67
Banff	105	1	64	105	0	41
Berwick	152	3	76	104	3	35
Bute	130	3	92	134	2	70
Caithness				106	1	0
Dumbarton	116	2	52	106	2	38
Dumfries	302	0	73	268	1	35
Edinburgh	101	3	5	101	2	45
Elgin	106	3	6	105	1	2
Fife	103	2	11	103	0	90
Forfar	103	2	11	103	2	51
Haddington	102	3	76	103	0	9
Inverness	114	1	81	109	3	14
Kincardine	112	3	76	106	1	80
Kinross	102	2	58	103	0	9
Kirkcudbright	162	1	60	184	1	93
Lanark, Glasgow and L. Ward	105	1	27	104	0	70
Lanark and Upper Ward	100	0	0	103	0	90
Nairn	121	3	90	111	1	93
Peebles	107	0	59	104	1	83
Perth	102	3	94	104	0	65
Renfrew	100	0	0	106	1	0
Ross	112	3	76	103	0	90
Roxburgh	129	1	64	133	0	25
Selkirk	129	3	11	126	0	3
Stirling	108	0	94	107	1	3
Sutherland	117	2	58	110	2	57
Wigton	195	2	92	201	1	1

An English Quarter of *Wheat* and *Peas* is 1 boll 3 firlots 3 pecks and 2 fifth parts of a peck, Scots measure.

Ditto of *Barley* and *Oats*, is 1 boll 1 firlot 1 and 1 half peck.

TABLE.

For reducing the price of the Eng. Quarter to the Linlithgow Boll.

Price pr. Quart.	Wheat. Peas. per boll.	Barley or Oats, per boll.
s.	s. d.	s. d.
16	8 2	11 11
17	8 8	12 8
18	9 2	13 5
19	9 9	14 2
20	10 3	14 11
21	10 9	15 8
22	11 3	16 5
23	11 9	17 2
24	12 3	17 11
25	12 9	18 8
26	13 4	19 5
27	13 10	20 2
28	14 4	20 11
29	14 10	21 8
30	15 4	22 5
31	15 10	23 2
32	16 4	23 10
33	16 11	24 7
34	17 5	25 4
35	17 11	26 1
36	18 5	26 10
37	18 11	27 7
38	19 5	28 4
39	19 11	29 1
40	20 5	29 10
41	21 0	30 7
42	21 6	31 4
43	22 0	32 1
44	22 6	32 10
45	23 0	33 7
46	23 6	34 4
47	24 0	35 1
48	24 7	35 10
49	25 1	36 7
50	25 7	37 4
51	26 1	38 1
52	26 7	38 10
53	27 1	39 6
54	27 7	40 3
55	28 2	41 0
56	28 8	41 9

PART IV.

AGRICULTURAL INTELLIGENCE.

HAVING arrived at the period when a pretty accurate opinion can be formed of the crop, both as to quantity and quality, we proceed to lay before our readers the various articles of intelligence, concerning that important subject, transmitted to us by our numerous correspondents. It is painful to observe, that the apprehensions expressed in our last, respecting the failure of the crop in North Britain, have been fatally realised in several districts. Indeed, the sentiments then given were formed, not only from our own observation, but from information furnished by experienced agriculturists in different quarters. In addition to a short crop, the evils attending an unfavourable harvest have followed. Much grain has been shaken, or has dropped in the working. The early cut fields have universally sprouted; and, from the unsettled state of the weather, the corn, which still remains in the fields, must be greatly damaged.

The produce of wheat in Scotland, of this year's crop, from every account, will be much below the usual quantity. Less of that grain, as formerly stated, was sown than usual, particularly in the northern counties. A great number of fields, even in the best districts, were thin; and though the quality, where it escaped sprouting, is generally good, yet a doubt can hardly be entertained respecting the deficiency of this article, perhaps to a greater extent than last season.

Barley appears to be a much better crop than last year, especially in all the northern districts, where it ripened in perfection. Oats may be considered as scantier than ever remembered in Scotland, and very unproductive in meal.—Many reasons might be given for this failure,—the wetness of the ground at seed-time,—the subsequent severe drought, which prevented their tillering,—the attack of the grub-worm,—the excessive heat during the Summer months, which is always unfavourable to this grain,—and, above all, the injury

sustained from the myriads of insects which covered them in August, and sucked out the whole juice from the straw. In a word, little or none of this grain presents a fine sample, and in produce from the mill does not go beyond the last year, unless it be in the Highland districts, where it then never ripened.

Peas, in general, are good; but beans, now commonly sown in their stead, scarcely exceed half a crop. As this species of pulse ripened early, much damage was sustained from the rains, both in corn and fodder. This remark, however, together with the foregoing ones, must be received with some little exception, as is very judiciously stated in another place, by a respectable correspondent; for one week, nay even one day, in point of harvesting, in this critical season, may make a considerable difference in the value of the crop.

Fodder of all kinds will be scarce in the extreme over the whole island, during the ensuing Winter; and the brute creation, unless the Winter keep open and mild, stand a chance of being exposed to great distress. Perhaps turnips could not be used with greater advantage, than by giving them in small quantities to the lean stock; otherwise they will be so backward in Spring, that feeding will be a tedious business. High prices, triple the usual rate, are talked of for wintering cattle upon straw, which consequently will be given to them in a limited manner.

Having now presented an abstract of the information communicated to us, it is our duty to notice the gross impositions practised upon the public, through the channel of the Newspapers, respecting the value of the crop, and the attempts lately made to inflame the minds of almost every rank in society, against the growers and dealers in the produce of the soil. It has been expressly stated, through the whole course of the season, in opposition to positive facts, that a most abundant crop every where loaded the face of the country, and that the high price of provisions has arisen, in a great measure, not from any real scarcity, but from a combination amongst the farmers, the dealers, and the manufacturers of grain, who are held out to public detestation, under the odious names of Forestallers, Monopolizers, Engrossers, and Regraters. These misrepresentations, and the conclusions drawn from them, have been supported by the opinions and decisions of men, who, at least, ought to have been better informed, and who have raised an alarm which has nearly

nearly set Britain in a flame. The mutual confidence which, in every well-regulated society, ought to exist betwixt the inhabitants of the country and those in towns, has thereby been relaxed, and a degree of enmity created, not much inferior to what prevails betwixt hostile nations.

We have lately seen this spirit displayed in acts of open violence and outrage against bakers, millers, farmers, butchers, and other dealers in provisions, not only in the metropolis, but likewise in many of our provincial towns. But it is to be hoped, that the wisdom of Government, supported by the returning good sense of the nation, will in future effectually prevent such disorders, and remove every impediment to a free internal traffic in grain, which alone can afford a regular and constant supply of provisions, proportioned to the demand and the quantity in the country. In this northern climate, clothing is as much a necessary of life as food. If the merchant and retailer were persecuted by law, or by the practice of the courts of justice, would the community be cheaper or better served, by being sent to the manufacturer? Most certainly the contrary effect would be produced. The manufacturer would not know how to proceed with his business; manufactures would receive a check; and the regular supply to answer the current demand in the market not arriving, scarcity would ensue, and with it an advance in price. In the present state of society, when the greatest part of the population of the nation is crowded into towns, the preventing, or throwing impediments in the way of a free internal commerce in grain or other provisions, is equally impolitic, and would be attended with the same evil consequences, as shutting up all the retail-shops, and preventing merchants from purchasing goods from one another, by which the price is supposed to be enhanced to the consumer; for it is not within the compass of possibility, that the inhabitants of the large towns can be supplied with provisions from the actual raiser of the different articles of consumption, no more than they can be supplied by every article of dress from the actual manufacturer: And this free commerce in grain, as well as every other article, so far from enhancing the price, by passing through different hands before it comes to the consumer, has a quite contrary effect; of which we shall give the following striking instance exactly in point.—In years of plenty, when wheat of our own growth nearly equals our consumption, the city of London is mostly supplied by corn-dealers,

who bring it from the country, and sell it in the public market: it is there purchased by millers, who again carry it to the country, manufacture it, and bring it back to the London market, where the flour is publicly sold to the bakers. In Scotland, in years of plenty, the bakers are mostly supplied by the farmers, who carry the wheat into the bakers loft at the mill, at their own expence, where it is ground for the baker, and the flour carried home to the bakehouse by the miller; the cost of grinding not being one half of what is charged in the neighbourhood of London. Agreeable to the popular opinion, bread ought to be considerably cheaper in Scotland than in London; but the reverse of this is the case. Upon comparing the price of bread in London, and the price of corn at the corn-exchange, with the prices of these articles in Scotland, it will be found, that bread is considerably cheaper in the city of London, in proportion to the price of wheat, than it is in Scotland*. We recommend the consideration of this fact to those who wish to throw impediments in the way of a free internal traffic in grain, by persecuting those who are engaged in that necessary branch of commerce.

Numerous associations are going forward to accomplish a reduction of prices, and resolutions entered into not to purchase higher than certain rates condescended upon. Without inquiring whether such measures are illegal or not, we must observe that they are grossly unjust. Their object is to take from the seller a part of the money which his articles would have brought him at market, if no restraint had been imposed upon its natural course; which is precisely the same, as if all the sellers were to combine not to dispose of their articles, unless they received higher prices than the state of the markets would give them. Under this last case, the law, it is presumed, and very justly, would instantly punish them for such a combination. Now, we know no difference between the cases: by the one, it is intended to make the seller take less money for his article; and by the other, to make the purchaser pay more than the level of the market warrants:—the consequences are precisely the same to the parties.

As

* At present, it is standard bread, at the medium price betwixt household and wheaten, that is baked in Edinburgh; whilst, in London, only wheaten bread is baked.

As this subject is interesting to every member of the community, we have been induced to discuss it in this leading article. We have given our sentiments, we trust, with candour, though with firmness and truth; a line of conduct we are determined to pursue.

Before we are done, it is highly proper to recommend, that similar measures should be taken to supply the wants of the poor, as were last season so generally practised. While we contend for freedom of trade and unrestrained markets, as being the sure method of insuring a regular supply of provisions, we as earnestly recommend sales, at reduced prices, to the lower classes, who, at the present rate of wages, cannot subsist themselves and families. The philanthropy of the country was distinguished, in the extreme, last winter; and, if Providence has visited us with another short crop, let it be the care and concern of all provided with the means, to alleviate to the uttermost of their power, the distresses of those who are unable to bear such calamities.

EXTRACTS FROM PRIVATE CORRESPONDENCE.

SCOTLAND.

Extract of a Letter from Inverness, September 1.

Our harvest is now general, and, if dry weather continue, the crop upon my farm will be nearly cut down this week. The crop, generally speaking, is very light, as we have had no rain worth mentioning for a long time. From the scarcity of fodder, I should not be surprised, that hay sells in the Spring at 2s. 6d. per stone. Several fields of barley have been lately sold from 16l. to 22l. per acre, which, in my opinion, will not yield above six bolls, or thirty-six bushels: oats proportionally high: so you will see what value is put upon the fodder.

The turnip-crop on my farm continues in a thriving state. Potatoes, though apparently good, are not likely to yield more than half their usual return, which will bear particularly hard upon the poor people. Within these ten or twelve days, the whole of the oats in this neighbourhood have been covered with a black insect; not a stalk but what carries thousands of them. As yet, I see no injury done.

Extract of a Letter from a Gentleman near Perth, September 11.

Our wheats are very thin, though, in general, the ear is close set, and the grain of good quality. Oats are, in most places, a poor crop; and the quality very inferior to an ordinary average. This may be attributed, *in part*, to the wet seed-time, the weakly seed sown, and the severe drought following, which, in many places, bound the ground, so that the plant could not forage as usual. Also, all round this quarter, the oat-crop, in particular, has been, for many weeks past infested with small blackish vermin, which, I am persuaded, must tend greatly to retard the nourishing quality from rising up the stalk, to mature the grain; and, in my humble opinion, this last mentioned cause has not been the least powerful in reducing the quality of the oats of this season. Barley, in most places is far short of its ordinary bulk: in some thin sandy soils, it was almost parched up. However, on the whole, the grain is of a fine quality, from its having the benefit of such an uncommon degree of sunshine in the course of the Summer. This remark, however, respecting the barley-crop, must be received with some little exception; and, indeed, all remarks of an agricultural nature, this season, must be cautiously made; otherwise most erroneous conclusions would be drawn, the crop being so various, at least in this quarter. On some of my fields, the variety of crops, from *good*, down to mere *nothing*, never appeared so as this year. In this neighbourhood, few peas are sown; what little there is this season, are what is called pretty corny, but little straw. Turnips, wherever they brairded fairly, have stood out much better than could have been expected, considering the dryness of the weather; and now, with the refreshing weather, promise a most luxuriant crop. I need say nothing about the state of the pasture grounds. They are here, as in most other places, much barer than ever I saw them. I hope the fine rains we have had, will, even late as the season is, produce some fresh vegetation, which would indeed be most acceptable, when fodder of all sorts will be so very scanty for the Winter supply. Potatoes were, early in the season, most promising; but I am sorry to find the roots are not like the tops in that respect. I hope they will still improve in size, though I have some little doubts on this head, from the appearance of fresh vegetation from some of the first formed potatoes at the roots of many of the plants. The shaws, however, in many places are still vigorous, though, in hollows, and by the river side, they are quite gone, from the effects of hoar-frost, which we had here about ten days ago. Live stock, of all descriptions, in our markets, are a mere drug. Butcher-meat is much reduced—best beef, 5d.; mutton 4d.; and it is thought will still be lower.—Inferior sorts much

much under the above. I can say nothing at present as to the price of new grain, no market being as yet fairly opened. Oat-meal 2s. per peck; the quartern loaf is 1s. 3½d.

Extract of a Letter from the same Gentleman, October 6.

I now send you a note of prices in Perth market on the 3d instant, although as yet no very great quantity of grain has been offered for sale.

Wheat, 40s. to 43s. 6d. per boll.
Barley, 30s. to 36s. per ditto.
Oats, none in market.
Oat-meal, 2s. 2d. per peck.
Barley-meal, 1s. 6d. per ditto.
Potatoes, 1s. 8d. per peck of 32 lb.
The Quartern loaf, 1s. 3½d.
Beef, 4d. to 5½d. per lb. Dutch weight.
Mutton, 3d. to 4d. per ditto.
Lamb, 4d. per ditto.
Butter, 1s. 6d. to 1s. 7d. per lb. Tron weight.
Eggs, 9d. per dozen.
Hay, 1s. 8d. per stone.
Oat-straw, 1s. per ditto.

In last week's newspaper, I observed a strange resolution amongst the good people in Edinburgh respecting butter. Although I am a great enemy to all such as demand extra profits on any article, in particular such a necessary of life as butter is; yet I am sorry to hear of any plan formed not to use this article. It must be evident to every person, in any degree capable of forming an opinion on the subject, that butter cannot be afforded this season for a price short of double the ordinary rate; otherwise those who furnish it must be soon ruined. I mention this only by the by, and beg you would take some notice of it in your next Number. The remarks I made in my last, on the crop, I can now confirm, having thrashed part of my wheat, barley, and oats. The two first are of excellent quality, but the last vastly inferior. What of the oats I have had at the mill, has taken six firlots to bring one boll of meal: and I am sorry to hear of even less returns than that. For about ten days prior to the 3d current, we had very indifferent harvest-weather—rains every other day, and yet no material damage done. We have now again fine dry weather, which I hope will continue for some days. There is now a considerable degree of vegetation in the ground; and our pasture-fields greener than in June. No doubt, the quality of the grass is vastly inferior to what grows in Summer; but still it will prove of great benefit to the bestial, and save what little fodder there is till Winter. Had we not been blessed with such mild weather, the prospect for Winter-forage would have been melancholy indeed. I am glad to add, that our potato-crop has greatly mended of late, and that turnips are still improving

improving fast. Since writing the above, I hear that barley has been this day sold so high as 42s. per boll.

Extract of a Letter from a Gentleman in Strathern, Perthshire, September 22.

Strathern has, this season, been particularly subject to the effects of the more than usual drought; therefore, our crops cannot be called good. The failure is chiefly felt in barley. Peas and beans, for the most part, have not so much straw as usual, but plenty of good pods. Oats are very short, the ear pretty well, and the grain of a good quality. Some, of an early variety, which had been manufactured, yielded not much less than meal for corn at the mill. Our wheat turns out better than was expected. The oats were lately much burdened with a black insect; but I do not find that much harm is thereby sustained. About the beginning of Summer they were severely cut up by the grub-worm; but afterwards, three or four stalks sprung up from those apparently destroyed; and such parts have turned out the best crop.

Turnips have, in a great measure, failed, though there are some good fields here. The pastures were reduced to dreary wastes during the long drought, but now begin to present the hue of Spring. Our hay-crop has proved very scanty; and, with the little straw which this year's crop affords, makes me earnestly hope for a favourable Winter; else I do not know what will be done with our stock.

I cannot say much about the price of grain; but I lately bought some old oats, at Perth, for which I paid 32s. Wheat is 55s.; hay 20d. per stone; and oat-straw 1s. Cattle sold pretty well at Falkirk Autumn tryst; but the preceding markets in our neighbourhood were dull and low.

Extract of a Letter from a Gentleman in the South-East Corner of Berwickshire, September 22.

I have lately had occasion to travel through Northumberland, Durham, and part of Yorkshire; and such observations as occurred, thrown together as recollection, amid the hurry of harvest-work, admits, are much at your service. I left Berwickshire in the end of August, some time after harvest was begun here, and returned on the 12th of September, after an absence of nearly three weeks.

I did not find the harvest a bit farther advanced, than on this side Tweed, all the way to the vale of Tees, which divides Durham

Durham from Yorkshire. In the noble tract of country from Tees to Knaresboro-forest, harvest-work might perhaps be a week farther forwards than here, especially with wheat, peas, and barley. In that fine turnip-district, vast quantities of later sown turnips had entirely failed, and the land was working over again, probably for wheat. The earlier turnips seemed good; but almost uniformly broad-cast: some few *rowed*, by the harrows only; but at such small intervals, as not to admit the horse-hoe. On these lands, I observed, in a former journey, that a great part of the dung was harrowed up to the surface; and, consequently, was in a great measure lost, both to the turnips, and those crops which are to succeed, The land seemed well pulverized; but by no means even tolerably cleaned from couch and other weeds. In this last excursion, I observed some fields, in which the turnips had not succeeded, most disgracefully covered by heavy crops of weeds, fast running into seed, if not already seeding. The succession seemed, on these *turnip*-soils—turnips, barley, broad clover for hay, wheat. Universally, a large proportion in perennial meadow, or grass for hay: consequently, these are never broken up for the production of heavy crops of grain and turnips; nor does the arated land ever derive the vast improvement of pasturage. Having, however, no opportunity of particular information, I know not how far this eternal jog-trot may be forced by tithes; but I do know, that it is imperiously continued by the total absence of leases.

Generally speaking, the inferior lands in Knaresboro-forest, where I was near a fortnight, have poor crops; and these are very much injured by the bad weather which occurred about the beginning of September. I saw wheat growing there, literally not worth harvesting, rent, seed, and labour out of the question; but indeed on land which ought only to carry trees.

In Knaresboro-forest, almost universally, a good deal in the rest of Yorkshire northwards, and almost generally in Durham, and the south of Northumberland, the oats were of the Tartarean kind. Those I saw at the inns, and in the fields round Harrowgate, prejudiced me much against them, as they were small-bodied, and very long tailed. They were likewise much mixed with wild oats; which, however, is an extraneous fault, owing altogether to bad husbandry.

In the Yorkshire harvest-work, where I had occasion to see it, each reaper made his own band, and bound his own sheaf. This is contrary to the principle of the *division of labour*, and seems not nearly so economical as our practice of band-winds, six, or even seven reapers, in two ridges, the middle reaper in each making the bands, and a *bandster* behind, who binds and sets up all the sheaves.

The

The reaping which I attended to, near Harrowgate, was more cleanly taken up from the stubble, than any ever I saw in Scotland. Even on wheat-fields, gleaning did not seem worth attempting. Returning, however, through the fine country already mentioned, by Rippon, Northallerton, and Darlington, I observed many bunches of gleanings on their way home; but most of these were evidently pulled, and I saw the cottagers, in several places, busily engaged in cutting off the roots from their gleaned wheat.

In spite of old custom, I am decidedly an enemy to gleaning; it encourages idleness, when hands are wanted for reaping; it initiates the young into habits of pilfering, as I know parents often punish their children if they do not bring home abundant gleanings, which prompts them to steal, that they may loiter; it occasions dishonest reaping, that plenty may be left on the ground for the children and followers of the reapers. I never permit gleaning, till my crops are carried off the ground; and then, because it is customary, the gleaners and my cattle may gather in conjunction. I once counted above eighty gleaners on a large stubble-field near Prestonpans, in which the reapers must have committed immense waste, to make it worth while for such a multitude to glean. As well might a farmer scatter uncounted handfuls of money by the road, as he returns from selling his grain, as leave grain, or allow it to be left, wastefully in the field, to be picked up by non-industrious, though busy poor. Let farmers, and all others, give of their abundance to those who really need; but scatter not at random, you know not what, to you know not whom.

In this neighbourhood (Berwickshire near the sea), a great loss has been sustained, in oats that were nearly ripe, when the thick weather came on at the beginning of this month. The necks of all the best pickles became black and tender, so that the wind and handling broke them off. I estimate the loss, on several acres of my farm, at twelve bushels the acre. Early oats escaped this injury; but were a good deal shaken about the middle of August, and are much discoloured by the thick weather. I do not observe much growth on the barley, or wheat, or peas, that were then cut. I have made some discoloured Angus oats into meal, which, after paying the millar, the Lord knows what proportion, produced 9 bolls of meal, from 10 bolls of oats; or 90 English stones of meal from 60 Winchester bushels of oats, which is exactly 21 avoirdupois pounds of meal from the bushel of oats.

So far as I can pretend to judge, the produce of grain on the good dry soils will be a fair average crop; and the grain, where not injured by weather, of excellent quality: But, on the clay lands, even the most fertile, the crop is thin; perhaps, generally

generally speaking, it will not exceed half an average; on cold wet lands it is excessively bad, particularly early oats, which, on some, even fertile clays, are hardly worth reaping. Universally, except on some very favourable spots, the straw is extremely short; so that, on the whole, few farmers will have above half the fodder of an ordinary good growing year. Hay, consequently, besides being generally a light crop, is rising fast in price. At Berwick, it began in the rick at 16d., and fell to 10d. the stone of 24 libs.; now it is said to have returned to 16d., and to be on the rise. I sold, four weeks ago, thrashed hay, at the rick side, for 14d. the stone of $22\frac{1}{2}$ libs. At Newcastle, I was told it began at 6l. and 7l. and is now 9l. the ton.

Wherever I have been, turnips have failed universally on cold lands, and very much so on later sown dry soils. Even on the best soils, the early sown turnips, though luxuriant in foliage, do not root by any means well: I think I have seen them nearly twice the diameter by this time of the season.

If I may judge from what I saw in Morpeth market, on the 10th of September, fat cattle, sheep, and lambs, are scarce; as great numbers, in a miserable state of leanness, were on sale, and, I was told, brought full 6d. the pound. The fat, I suppose, are much exhausted by the demand; the succession has been prevented by the long drought; and graziers are pushing off what they can, from the bad prospect of Winter food.

Extract of a Letter from Thurso, September 25.

I have, with much satisfaction, perused the three first Numbers of your valuable Magazine, which will soon find an extensive circulation in this part of the country; and I hope your success will be equal to the general utility of your laudable undertaking.

I see that you wish to be furnished with reports of the state of the crops in the different districts. I have the pleasure to inform you, that, in the county of Caithness, the hay-crop has been abundant, and was got up in excellent condition. The corn-crops, in consequence of the long continued drought, will be short in fodder, but by no means deficient in grain, and that of excellent quality. The state of harvest affords the prospect of a safe and speedy conclusion, the weather being uncommonly favourable, and the reaping far advanced. On my own farm, in the neighbourhood of Thurso, the corns were all got in, and *the barn-yard slap closed, on the 15th of this month;* and I think I may venture to say, that, by the 10th of October, not a sheaf will be out in any part of this county.

Our

Our remote situation, no doubt, subjects us to certain inconveniences in regard to markets; and perhaps many intelligent men, in other parts of the kingdom, have formed very erroneous opinions and notions of the fertility of our soil, and the nature of our climate: but they should not forget, that, in the oldest Scotish Law Book, the Regiam Majestatem, the Caithness boll is laid down for a standard measure; and, as facts are stubborn things, I here give you a correct statement, taken from the Custom-house books of the port of Thurso, of the quantities of grain and meal shipped off, of the growth and produce of Caithness, of crop 1799, which, being compared with the state of other counties, in that season of general scarcity, will convince your readers, that, in point of agriculture, this district is not so far behind as many suppose it to be.

Grain and Meal shipped off, viz.

	Bolls.
Wheat - - - - -	36
Barley, bear, or bigg - - -	6,847
Oats - - - - -	2,472
Peas and beans - - - -	12
Oat-meal, of 140 lb. avoirdupois per boll -	9,020
Barley-meal, of 156 lb. avoirdupois per do.	1,370
	19,757
Besides several quantities, sent partly over land, and partly in boats from different creeks, to the neighbouring counties, without Custom-house dispatches, not under - -	1,600
In all	21,357

You will observe, that not a boll was imported or brought coastwise into the county, and the inhabitants were plentifully supplied.

The Caithness boll of barley and oats is 5 per cent. better than the Linlithgow standard.

Berwickshire Quarterly Report.

The fine warm weather, which commenced in July, with the unremitted continuance of drought, made corn shoot prematurely into ear, and brought harvest on much earlier than was expected: many farmers had begun reaping previous to the 20th of August, since which there has not been 20 days entirely free of rain; from the 3d to the 10th of September, it rained almost incessantly, by which the cut corn was greatly sprouted, and even standing corn,

corn, where fully ripe, was in many cases sprung, and very much discoloured.

Wheat, which occupied a smaller extent than usual, is not equal to an average crop per acre; but the quality is in general good. The peas crop, which also occupied but a small extent, had not a promising appearance at the beginning of this quarter, but recovered surprisingly after the warm weather set in, and has at last turned out exceedingly productive. Oats are a very light crop, and, from the trials already made, do not promise to yield, per boll, a greater weight of meal than last year. Barley is good in quality, where not damaged in harvesting, but will come short of an average crop per acre. Straw is every where greatly deficient in quantity, and much of it discoloured by the rains. In the lower district, harvest is now nearly concluded. Reapers wages have been from 6d. to 8d. below last year; men being about 1s. 2d., and women 1s. per day, with victuals; though, one week, from the pressing demand after a delay occasioned by bad weather, they were as high as 2s. and 2s. 9d. per day.

Potatoes are in general small, and not likely to turn out productive. They were stinted by the drought, and have, in many situations, sent forth young fibres, each potato becoming a mother plant. Turnips, in general, are extremely thriving, and may be considered as better than an average crop. Young clovers met with a severe check from the drought: some few fields died away altogether: however, most of them have recovered a healthy appearance, though not so forwardly as usual. The fallows, in general, are in fine order, and a few of them already sown with wheat.

Hay, which proved a very light crop, was in most cases extremely well got; prices from the rick were from 1s. to 1s. 4d. per stone of $22\frac{7}{8}$ lb. English. The foggage, or aftermath, has this season made but a very poor appearance. Pastures suffered greatly from the drought; notwithstanding which, sheep and cattle kept their condition better than could have been expected; and, since the fields resumed their verdure, stock of every description has made a rapid improvement.

Markets for lean cattle were very dull in the beginning of this quarter; but since Dunse Lammas fair, prices have rather been upon the advance. The demand for sheep to the English market, has of late been considerable; in consequence of which, prices have run from 18 to 24 per cent. above last year. Wool, in the lower district, sold from 18s. to 21s. per stone of 24 lb. English, being about a shilling higher than last year; but the fleece, in general, weighed from 16 to 20 per cent. lighter. New corn has been selling at Berwick as follows; viz. wheat, from 60s. to 70s.; barley,

barley, from 38s. to 42s.; oats, from 26s. to 30s. per boll of six Winchester bushels.—Butcher-meat at Dunse, per lb. of 17½ oz. beef from 5d. to 6d., and mutton from 5d. to 6d.

September 30. 1800.

Ross-shire Quarterly Report.

THE constant and severe drought which prevailed during the months of June, July, August, and a part of this month, though favourable in bringing forward the harvest, has, in many places, been attended with the most pernicious consequences. Oats, which is our principle grain, have suffered most; they are not half their usual bulk, and it is found they meal poorly. Not above one third of them are stacked, the harvest having been much retarded, for upwards of two weeks past, by wet weather; but, should they escape injury from the weather, still there must be a great deficiency, and will be found to prove, in quantity as well as quality, far below an average crop. Barley, though not bulky, may be pronounced a good crop upon the ground; it is of superior quality, and a considerable part of it has been stacked without a shower. Wheat does not enter much into the present system of farming in this county: the few farmers who raise that grain, were prevented from getting their usual quantity sown, by the rains in last Autumn; and a good deal of what was sown was ploughed in the Spring. What remains, is very thin in the ground; but the quantity is so trifling, that it is supposed there is scarcely as much growing in the county, of this crop, as will sow the next. Peas are below an average crop, in many places having totally failed from the drought; but they are not a crop of general attention. Potatoes will not be productive; and a great many of that valuable root have been prematurely consumed by the poor people, who, for want of meal, began much sooner to use them than usual. It is distressing to see the patches of the poor cottagers so far exhausted at this early period. Many families have lived solely upon them for two months past; and by thus taking them before they had attained any thing like a full crop, what they expected, at planting, would have served their families till next crop, will not last beyond Christmas. Turnips, where they have not totally failed from the drought, are a pretty good crop. Hay, in many places, was scarcely worth the cutting: it sold from the field at 1s. per stone, and none can now be had under 1s. 6d. New oat-meal has been selling at 40s. per boll of nine stones, and barley from 40s. to 45s. per boll: But we have scarcely a market for grain at present; not so much for want of a demand, as for want of grain to sell. No one will thrash out at present, for fear of wasting their straw before Winter,

ter, of which there never was such a scarcity; four times the usual price is offered for wintering cattle with straw. Butcher-meat sells from 3d. to 4d. per lib. and beasts in condition meet with a market in proportion to these prices; but for lean and young cattle, with which we are far overstocked, we have no demand.——*September* 29. 1800.

Argyleshire Quarterly Report.

FROM the coldness of the Spring, and the great drought of the Summer, our corn-crops this year are not so bulky as usual. But what is wanting in straw, is more than made up in grain; so that, upon the whole, the crop may be considered as a good one, and more than sufficient to serve the county, if much of the bear be not distilled. As we have had no rain till the 20th of September, all the bear, and about half the oat crop, was got in before the weather broke. From the scarcity of water for grinding (a very uncommon thing in this county) little of the grain has been manufactured till within these ten days, in which time bear-meal has fallen from 20d. to 14d. the peck, and oaten meal from 3s. to 1s. 10d.

The potato crop is of an excellent quality; firm and dry, but in most soils not so large and numerous as usual. Few of the potatoes have yet been dug or sent to market. At Campbeltown, they sell at a shilling the peck. At Inverary, the Duke of Argyle, who raises large quantities, sells them at the low price of former years.

As the cattle were low in Spring, and the grass late of springing up, the quantity of butter and cheese made, is less than usual. Butter sells at 14d. and cheese at 5d. the lib. Butcher meat from 4d. to 5d. where it is sold by weight: but, through the county in general, cows and sheep are bought whole and alive. There is little demand for fat cattle, and it is thought they must be sold much lower than for some years past. Sheep farmers, who sold their wedders early, got nearly the price of last year, a little under or over 20s. But those who were last of selling, made a worse market. Wool has sold considerably higher than last year; a great part of it about 8s. the stone.

The quantity of herrings taken this season on the coast of this county (which commonly makes a considerable part of its revenue) has not yet been so considerable as for some years past; nor are the last accounts from the herring-busses that have gone to the North Isles, so flattering as could be wished. But as the most of the fish is commonly taken after this time, there is yet no reason to despair of a good fishing. The herrings, sold fresh along the coast, have been generally about 3s. a hundred.

At present (in the begining of October) our weather is wet and cold. We are thankful for the good weather we have already got; and trust in a gracious Providence, that the year will be crowned with his goodness.——*October* 2. 1800.

Perthshire Quarterly Report.

THE county of Perth is so extensive, that the state of the crop in one district can hardly be accounted a true criterion of the general state of the harvest over the whole; yet, so far as the situation of this county has fallen under my observation for some weeks, I am desirous to acquaint you; that you may judge in what degree it may be of use to the public, through the medium of your Miscellany.

The extreme drought last Summer, and part of this Autumn, had parched the ground so much, that two kinds of soil have proved very unproductive; the light sand and gravel, and also the stiff cohesive clay or till. The first was too porous and open, to resist the influence of the season; the last was of so close a texture, that it became hard as a sheet of iron, and locked up all the principles of vegetation. All our crops have failed in both these kinds of soil. The straw is extremely short, insomuch that, in a variety of instances, it was impossible to gather any by the sickle: the people were obliged to pull the crop, as they do lint, or to cut it down with the scythe. The grain is generally meagre and thin; being blanched under a burning sun, before the usual season of ripening.

Wherever the crop grew from old lea, or from a deep loamy soil, or on level haughs, where the moisture was abundant and not easily exhaled, or in the narrow glens of the Highlands in the vicinity of mountains, which attracted clouds and occasional vapour, being cherished by these favourable circumstances, it has proved abundant, the grain well filled, and the straw no scantier than usual.

Upon the whole, however, the instances in which the crop has been as good as usual, do by no means counterbalance the instances in which it has failed; so that, in my opinion, taking the whole county at an average, we may be said to want a third part of what is estimated a fair crop.

Since the middle of September, the weather has broke, which is a critical season for the greater part of this county; and if the rains continue, which is very likely, from the long tract of dry weather lately past, we may lose a great part of what remains still in the fields.

It

It is to be hoped, that Government will adopt early and effectual measures this season, to ward off the pressure to be dreaded by the scarcity to be expected from the failure of the present crop. Importation is expensive, owing to the successive and accumulated profits always derived from grain, by every hand through which it must pass, before it can reach the consumer. Importation may eventually prove extremely precarious and uncertain, by the failure of crops in other countries, of which our experience, last season, is an irrefragable proof. Why not do the best we can at home, and husband the grain we have, with the most prudent economy?

Government did, last season, adopt the expedient, which they had formerly fallen upon in similar cases, and which they may probably think upon again in the present situation of the country, *to prohibit the distillation of grain into spirits.* This expedient is well meant; but it is only doing things by halves, or rather doing nothing at all, when you take the loss of revenue into the account.

So long as there is an unbounded license to malt, all the restrictions to distil, are nugatory and ineffectual. Last season, almost the whole of our home-grown barley, and a great deal of our imported barley, was converted into malt, and every person of this part of the kingdom, even every school-boy, knows that four fifths of this malt was made into whisky, in spite of all restrictions to the contrary, and in absolute defiance of law. Government did not, perhaps, foresee this malversation, occasioned by a collusion between the maltsters and the smugglers; and, therefore, they stand excused by every well-disposed man. Those at the helm of affairs, to whom we look up with anxiety for relief, no doubt expected that malting might go on, and, at the same time, that it was possible to suppress distillation. But every time they have calculated on this possibility, it has failed; and if they should try the same expedient fifty times, it will fail as often.

It is so easy to elude the law in this respect, that no human prudence, no human sanctions, can guard against the trespass. Allow me to malt to any extent I please, and to dispose of that malt to whom I please; having sufficient capital, I engage fifty, or as many hundreds of pennyless beggars, who understand distillation; I provide them with money, to purchase apparatus on a small scale; I sell them malt; they retire into woods and dens, and the crevices of rocks; into islands, and sequestered glens and mountains. If they are seized by the officers of excise, and sued before the Justice, they have nothing to lose; if they escape, which is often the case, I receive their spirits in exchange for my malt, and by this gainful nefarious traffic, I make cent. per cent. of my money, as I pay no duty but that for malting, and a trifle to these lawless hirelings.

This is no new or ideal scheme of injuring the commonwealth, which an honest man ought not to suggest. It has been followed almost openly, during the time of our greatest distress, within these twelve months past.

A remedy might be easily supposed; but it is of no avail to develope the evil, or to point out the remedy, unless our legislators think seriously of putting a stop to such a glaring misapplication of human food.—*October* 2. 1800.

Morayshire Quarterly Report.

One fourth of the grain in this county is still uncut, and a considerable part of what is cut remains in the fields. The weather has been unfavourable for eight days past; and more rain will injure the wheat and barley much: hitherto, both are free from springing.

As one half of our land consists of sandy soil, a fourth of coarse clay, and one fourth of free rich loam, the deficiency of corn and fodder on the two former, from causes evident to every farmer, is beyond precedent since the year 1781. Wheat is not supposed to average more than five, and barley four and a half bolls per acre; but both, if fairly got in, will be of exceeding fine quality. Oats are still more deficient in quantity, as well as quality. For weeks previous to their arrival at maturity, this grain was infested by an insect, which, placing itself on the stalk and bearers, weakened both, and evidently prevented the pickle from receiving that small nourishment which the parched earth was little able to afford. Of last crop, this county spared many hundred bolls of oats, equal in quality to any, and superior to most in Scotland: It is doubtful if crop 1800 will do more than supply ourselves. Potatoes are a poor crop, but the quality is good; and as farmers, who were in the practice of feeding cattle when worth but 4d. per peck, will thus, when likely to sell at 10d. to 1s., be induced to bring them to market, it is probable that the inhabitants will find a sufficiency both for food and seed.

No wheat or oats are yet thrashed out, nor prices fixed; for, while the weather continues such, that cattle can find even a scanty maintenance in the fields, farmers will not be easily induced to thrash out, when provender is in such request. Barley and straw have sold on the ground for 3l. per boll. Hay gives 2s. per stone, and more likely to rise than fall in price. Brewers are paying 35s. to 42s. per boll for barley; but little has been grinded down for meal, as the markets are yet supplied with old grain, bought up by the magistrates and

and incorporated trades of Elgin and Forres, from farmers and corn-dealers, at 28s. to 36s. per boll, and sold according to its produce in meal, to keep them from loss; so that probably in no county of Scotland, except Caithness, were the inhabitants so cheaply furnished with meal.

For two or three weeks past, cattle of all descriptions have met with a ready sale, but at prices so low, that money will be lost by the graziers, who still think themselves fortunate to get clear-handed, considering the want of Winter keeping. Turnips, although greatly improved during the last six weeks, are rooting poorly, and are still far under an average crop. Beef and mutton sell at 2½d. to 4d. per lib. and not likely to alter before Christmas.

The Morayshire barley and oat firlot contains 32 Scots pints.

Wheat ditto 22 ditto.
Hay, 20 lib. Amsterdam per stone.
Potato, 32 lib. do. per peck.
Beef, 16 oz. do. per lib.

Five firlots of oats go for a boll, when sales are made in the county.

Few peas or beans are sown in Moray; and both are this year a bad crop.——*October* 3. 1800.

Extract of a Letter from Grangemouth, 29th September.

THERE are yet about two thirds of our crop in the fields: what is stacked, in general, bulks ill. Barley is the worst crop, and in quantity will not yield more than half of an ordinary year's crop. Wheat is middling, and will not fall much short. Oats were very thin on the ground, and short in the straw, but will give well in the mill, and exceed the produce of last year, though they are not above three-fifths of a crop. Beans are strong on the ground, but will not yield well on the barn floor: they are, however, a better crop than last year. Peas are a very good crop, and will be equal in quantity to any ordinary year. The quality of the whole will be good, if we have a continuance of good weather to get well in. These are, at present, the general opinions respecting our harvest; but, until it is all brought in, it is not easy to form a just idea of the quantity. Few farmers expect half their usual fodder. The crop of potatoes has failed very much. Prices, we are of opinion, will remain much as at present, for a month or two; but, thereafter, we doubt they will go higher. Annexed, you have the present prices of grain, which are very nominal. When we get any farther information respecting the state of our crop, it shall be communicated.

Wheat,	40s. and 45s. New, 50s.	
Ditto foreign,	42s. — 50s.	Per boll Stirlingshire, which is $7\frac{1}{2}$ per cent. above Linlithgow.
Barley,	30s. — 37s. New, 42s.	
Oats,	25s. — 30s. Fine, 32s.	
Beans,	26s. — 30s. New, 38s.	
Peas,	28s. — 31s.	

Oats, 2s. per peck in retail.

Extract of a Letter from Dunkeld, October 2.

I SHALL do myself the pleasure of communicating such information as has fallen in my way. The showers of rain in June, July, and August, only wet the surface; but, during September, a great deal of rain has fallen. Along Strath-Tay, as far as the junction of the Tummel, and along the Tummel, and around Blair, the rains were frequent in August, and the crops of grain better than in this quarter.

In the above tracts, the barley crop may be considered as remarkably fine, and the oats short, but good in quality. Potatoes are greatly benefited by the late rains; flax tolerable; and, as for turnips, few are cultivated, except it be upon the farms of proprietors.

From the junction of the Tummel with the Tay, all the way to Perth, the crops have suffered much from the dry weather. They are of very little bulk, but generally good in quality. From Dalnacardoch, down the vale of Athol, and along Strath-Tay to Perth, the crop is cut down, and almost got in to the stack-yard, though much retarded by the rain, which falls every day. A great scarcity of hay and other fodder. Fat cattle are on the rise; and the demand for lean stock is increasing. The pastures are now pretty good. The oats suffered much from a black insect, particularly those upon light soils.

State of the Markets.

Hay, 1s. 6d. to 1s. 8d.; salt butter, 22s. to 22s. 8d.; cheese, 8s. to 9s.; all per stone of 22 lib. Fresh butter, 18d. per lib.; beef, 4d. and $4\frac{1}{2}$d.; mutton, $3\frac{1}{2}$d. and 4d.; oat-meal, 2s. 4d. per peck; wool, 12s. to 14s. per stone; oats, 28s. to 30s. per boll; but little of this crop yet brought to sale.

Extract of a Letter from a Farmer at Strathmore, October 2.

VERY few trials have been made of this new crop; as the apparent scarcity of fodder is so great, that thrashing will be delayed as long as possible. We are well advanced with harvest-work, and nearly all in the stack-yard; but, in the eastern parts of the county, they are much

much behind, though, in ordinary years, they are always before us. Turnips are generally good. I never had better. Oat meal sells at 2s. 6d. and barley meal at 1s. 6d. per peck. Barley for malting has been sold from 45s. to 48s. per boll, but not much to be got at any price. Potatoes are a bad crop, which will prove a material loss to the lower classes. Cattle have a tolerably quick sale, but they are not plentiful; I mean good ones.

Extract of a Letter from a Farmer in Teviotdale, October 3.

THE corn-crop, in the low district of Roxburghshire, will not average that of last year in the number of bolls; but, from the superior quality, will be fully equal (oats excepted) in point of the means of subsistence. From the beginning of September to the 10th, we had almost constant fogs, breaking into showers, which damaged the corn very much, causing a great part of it to sprout, whether cut or uncut, particularly wheat. In the higher districts, the harvest is already completed, and will yield more than double of last year's produce, both in quantity and quality. Turnips, upon which we place great dependence, may be said to be a full crop, except those sown upon clay soils, which have completely failed. From the great deficiency of fodder and grass, recourse will be had to them early. It is expected that they will bring high prices.

Grain still keeps high. Wheat, from 62s. to 75s. 6d. per boll of 6 bushels; barley, 38s. to 50s.; oats, 30s. to 37s. per boll of $7\frac{1}{2}$ bushels. No peas or beans in the market. Beef 4d. to 6d.; mutton, $3\frac{1}{2}$d. to 6d.; veal, 5d. to 7d.; lamb, 3d. to 5d.; pork, 3d. to $4\frac{1}{2}$d.; all per lib. weight of $17\frac{1}{2}$ English ounces.

Potatoes, which in the beginning of Summer flattered our hopes, will turn out an ordinary crop, being stinted in their growth by the severe drought. Short wool was sold from 20s. to 28s.; some very fine, as high as 32s.; long ditto, 18s. to 21s. per stone. Butter 18d. per lib. of 24 ounces; and in firkins of 56 lib. avoirdupois, from 55s. to 63s. As to cheese, no price is yet fixed, but from 10s. to 12s. per stone is expected. Hay was a very light crop; but we have small demand for that article, unless during a severe Winter. Oat-meal is 4s. per stone, but expected lower next week.

Extract of a Letter from a respectable House in Glasgow, Oct. 3.

WE have had a considerable import of flour and wheat from America; not less than 8000 or 9000 barrels of flour, and 16,000 bolls of wheat, of excellent quality, and in good condition. The canal being shut up on account of the great drought,

little grain from the eastern coast has been received for these two months past. We beg leave to say, that all wheat sold here by measure, is by the Linlithgow firlot; and that all barley, oats, and beans, that come to this market by the Canal, are sold by the Stirling measure, which is $7\frac{1}{2}$ per cent. larger than Linlithgow measure. There are four counties within five miles of this city, and all their measures are different, which gives us a great deal of trouble. Stirling is $2\frac{1}{2}$ per cent larger than Lanark; Renfrew is $2\frac{1}{2}$ per cent. larger than Stirling; and again, Dumbarton is 2 per cent. larger than Renfrew. Would not our Legislators do well to make all measures of one size, which would be a great benefit to the trading interest of the kingdom.

The wheats in this neighbourhood were thin upon the ground, but will turn out well from the straw, and are of excellent quality. What has already come to market, weighs from 60 to 62 lib. per Linlithgow firlot. Barley is also fine in quality, and supposed to be a good crop; weight from 18 to 19 stone English, per Stirling boll. Oats are but light upon the ground; and all that were early got, are only middling in quality. Late crops are better; beans and peas a fine crop. As more than one half of our crop is still in the field, we are afraid it will suffer considerably, unless the weather change soon. Potatoes are fine in quality, but not very luxuriant in the field. The hay crop has not turned out well; and the pasture and the meadow grasses have been greatly hurt by the long drought. Fodder will be scarce. Fat cattle are selling well, and bring high prices.

Present Price of the following Articles:

American wheat,	50s. to 52s. per boll of 240 lib.
Dantzic ditto,	50s. — 54s. per measure.
Hamburgh do.	48s. — 50s. per do.
English do.	45s. — 50s. per do.
Scotish do.	40s. — 50s. per do.
New do.	42s. — 48s. per do.
English barley,	30s. — 38s. per do.
Scotish do. new,	36s. — 40s. per do.
Baltic oats,	24s. — 30s. per do.
English do.	28s. — 36s. per do.
Beans of all sorts,	30s. — 40s.
Peas ditto,	30s. — 35s.
Oat-meal,	24s. — 30s. per boll of 140 lib.
Ditto new,	32s. — 35s. per do.
Hay,	1s. — 1s. 2d. per stone.
Beef,	6d. — 8d. per lib. tron.
Mutton,	6d. — 9d. per do.
Bear-meal,	16d. — 18d. per peck.
Peas-meal,	18d. — 20d. per do.

Inverness

Inverness Quarterly Report.

THE fears formerly expressed respecting the crop, are too well verified: for, owing to the extreme drought, it is likely to fall short of an average. The wheats will not return a quantity equal to the consumption of the country. Barley, on the whole, comes nearest to an average crop. Oats are defective, both in quantity and quality, and peas very indifferent. Fodder must be exceedingly scarce, and hay, consequently, high in price. Potatoes, though in general looking well, are much complained of. I have heard of no grain sold at fixed prices, except barley, at 42s. and 48s. per boll. Oatmeal sells at 2s. 6s. per peck of 9 lib. Dutch; beef and mutton 3d. and 4d. per lib.

The first part of our harvest was favourable; but, since the 20th September, we have had very broken weather, and a considerable part of the grain is still out. The Highland districts of the county did not suffer so much by the drought as the lower parts; for, in the former situations, the crop, upon the whole, is thought fully equal to that of ordinary years. The price of lean cattle is very low. ——*Oct.* 4.

East-Lothian Quarterly Report.

THE dry sultry weather which commenced early in the Summer, and which we noticed in last Report, continued with unremitting ardour, accompanied frequently with dry parching winds, till about the end of August, when the wind, settling in the easterly points, brought on a tract of extremely damp weather, being a continued drizzling mist, known in this country by the name of an *easterly harr*. As this damp weather was accompanied with a considerable degree of heat, and at the same time a dead calm, it occasioned some damage to the crop that was cut, particularly to the wheat, barley, and beans. Even in uncut barley and wheat that were completely ripe, several of the grains appear to have vegetated, though not in the least lodged. The appearance of the oats is also hurt by the wet weather: being mostly ripe, and uncut during that period, they are much discoloured with the rain. The long continued drought had withered up every pile of grass on the pastures, and stinted the growth of every plant under cultivation; and, before the rain came, the crop was too far advanced to receive any advantage from the moisture. If the Autumn of last year had been favourable for putting in wheat in proper season, it is probable the crop of that grain would have been abundant; for, being a native

tive of a warm climate, it requires a hot sun to bring it to perfection, and consequently the wheat of this crop is of a remarkably fine quality. The thick set woolly-eared kind, which, last season, owing to its retaining much moisture about the ear, was more defective than the kinds with thin set ears and smooth chaff, is this year reckoned superior, and, in the general run of seasons, will be found to be the most productive of the two, and best suited to the soil and dry climate of East Lothian. But although the wheat, this year, is of the best quality, it is thin upon the ground, owing to the bad tilth of the soil, occasioned by its being drenched in moisture last season, and the severe droughts succeeding in this, which rendered the soil so hard, as completely to prevent the plants from tillering. When, therefore, we take into consideration the small quantity of wheat sown, its thinness on the ground, and deficiency of bulk in the barn-yards, we are of opinion, that the crop of this year will fall far short of the produce of an ordinary year.

The crop of barley is extremely various. On some damp free soils, it is a middling good crop; on dry bottoms, and on strong lands, indifferent; and on the lands that were much ploughed in the Spring, or late of sowing, it is most wretched. The quality of this grain, on the strong soils that were early sown, is fine, as also on the free dry soils, if not prematurely ripened with the drought; but the quality of late-sown barleys, that were not ripe when the wet weather set in, will prove very indifferent. Upon the whole, the crop of this grain may be esteemed below mediocrity. Beans are not half a crop, short in the straw, thin on the ground, and not well podded. They were much hurt by an insect that covered the leaves and upper part of the stem, in the end of Summer and beginning of Harvest, and have also sustained damage from the wet weather, having been mostly cut when it came on. The oats in East Lothian, this season, are certainly the worst crop ever remembered by the husbandman; short in the straw, thin on the ground, and of a wretched quality; the grains being small, husky, and long-tailed: and, to all appearance, as well as from the trials that have been actually made, on an average, they will not produce above fourteen pecks of meal per boll. The ears of this grain, in most fields, during the month of August, were covered with dark-coloured insects, which clung in numbers about each grain, and probably hurt the crop, though their depredations were not apparent. In a field after Summer fallow, on a clay soil, the following uncommon occurrence was observed. The crop looked well in the early part of Summer; but, in the month of July, when eight or ten vigorous stems, from six to eight inches long, had pushed out from one seed, a great number of these vigorous plants were noticed going into decay. Upon examining their roots, they were found

found totally destroyed by a worm or maggot, which had also eaten out or corroded the heart of the stems. All these plants completely decayed before harvest, insomuch, that the field will not yield five bolls per acre.

Turnips have in general failed through the county. In many fields, the seeds never vegetated, for want of moisture; and in others, the severe and long continued drought rendered the plants sickly, when they were attacked and destroyed by a number of caterpillars and insects of various descriptions. In many fields, they have indeed escaped, and may turn out a middling crop; but, upon the whole, the cattle fattened in the county during the course of the ensuing Winter, upon these nourishing vegetables, must be few, when compared with the numbers fed off in an ordinary year.

The pasture grass being completely burnt up through the Summer, little milk and butter was produced, and many of the fattening cattle were hurried to market before they were fully fed. This occasioned a glut in the butcher-market for a period; but they are now growing scarce, and prices on the advance. Good fat will bring 7s. 6d. and 8s. per stone, sinking the offal. Owing to pastures being gnawed to the roots, by the starving cattle, in the time of the drought, the fields have now an uncommon verdure, every pile of grass being exposed to the eye; but this more in show than in reality. Little or no clover was cut a second time this season; at any rate, the deficiency of the Summer grass cannot now be made up.

To conclude: We cannot view the deficiency of the crop, both with respect to fodder and grain, in the half-filled barn-yards throughout the county, without putting every individual on their guard, by a rigid and well-timed economy, to remedy the evil as much as lies in their power: for as the price of every commodity depends upon the demand and quantity at market, it is only by diminishing the consumption, that, in the event of scarcity, the prices of grain can be kept moderate; and it will undoubtedly be found, that every restriction on its free circulation, and internal commerce, so far from being of service to the community, in reducing the price of grain, will ultimately have the contrary effect. ——*October* 6.

Tweedale Quarterly Report.

THE general face of this county being hilly, naturally points out the sheep-husbandry, as the most eligible mode of farming for it; yet, though

though sheep is our staple commodity, there are few farms on which the plough is not less or more employed, and many are occupied equally in both ways. The produce, in ordinary years, exceeds the consumption of the inhabitants; and considerable quantities of barley and oats are sent to Edinburgh, and other places.

Last year was an exception, as, from the failure of the crop, the greatest part of seed-oats were purchased from the coast-side, and also much of the grain needed for bread during the Summer months. The backwardness of the season, and high price of seed, prevented the farmers from sowing the usual quantity of grain for the current crop, and occasioned a greater portion of the land, than common, to be occupied by potatoes and turnips. The latter, where sown in a regular rotation, and with a proper quantity of dung, promise to be a good crop; but potatoes, under the best culture, do not appear to be near so prolific as in former years. The young potatoes vegetated after the rains, and set out fresh shoots, though still adhering to the parent stem, which, in many cases, produced potatoes about the size of large peas. The crop is nevertheless now evidently improved.

The month of April was friendly to vegetation; but the succeeding months turned out so much the reverse, that both corn and grass were greatly hurt. The drought about the middle of July became so violent, as almost to annihilate the pastures; yet still the early sown grain was not so much hurt, though what was late sown suffered greatly.

The hay or sown grass turned out a middling crop, producing, in many instances, 200 stone, of 23 English pound, upon the acre: but, where eaten in the Spring, or where raised upon cold stiff soils, was, in many cases, hardly worth the cutting. It is very common to eat the hay-fields, during the Spring months, with ewes, when lambing, as they give a seasonable supply at that critical period.

Sheep, notwithstanding the drought, were as good as in common years. That species of stock agrees better with heat than black cattle; the latter having suffered severely, both in respect of the quantity of milk given, and in the degree of fattening, when intended for the butcher. The lambing season was excellent, and the crop of young lambs as good as could be wished.

The oats, peas, and even the bear, where sown early, have turned out middling well; but the late grains, especially of those who were foolish enough to sow their own frosted seed, are poor indeed. The bear on deep soils is a middling crop; on stiff land, very indifferent. Peas, of which there is a large quantity sown, the land being mostly new limed, are good; unless

unless in those parts where the extreme drought got the better of them before they were filled. From trials made, oats and barley appear very small; and, at the mill, the former does not yield above 7 stones of meal to the boll, containing 128 Scots pints. Upon the whole, what with the limited sowing, and the effects of a backward season, this county will be considerably below an average crop.

The harvest, that is to say the cutting of the crop, is nearly over; but a great portion is still standing out. What is brought in, is far from being bulky; and a scarcity of fodder is seriously feared, the appearance of which excited every farmer to cut as much boggy coarse hay as possible.

No regular market for grain has been in this county during the Summer; the supplies having come from Leith, and consequently, the prices regulated by those of that port. A considerable quantity of the grain imported by the Associated Societies came here; but the price has not been much less than of that which was bought by dealers from the merchants. Present price of oatmeal, 1s. 10d. per peck; bear-meal, 1s. 6d.; pot-barley, 3d. per lib.

Little wheat is raised in this county, that article being brought from other places, and has, through the Summer, cost 3l. per boll of 90 Scots pints. Butter has been 13d. and 14d. per lib. of 23 ounces. Cheese of cows milk sold green at 4d. and 5d. per same weight. The price of ewe-milk cheese not yet fixed.

Beef and mutton have sold, for this some time past, at 6d.; lamb rather lower. Wool, per stone of 23 lib., from 8s. to 9s. The market was dull at the first; but, towards the end, the merchants purchased more freely. The sheep here are mostly of the black-faced breed, and the wool coarse; attempts to introduce the fine woolled sheep not having succeeded.

Wedder and ewe hogs (sheep of a year old) were sold at Linton market, from 10l. to 15l. per score of 21. Holding lambs, or those bought for stock, from 4s. to 6s. each. Fat lambs, to the butchers, from 5s. to 10s. according to weight and quality. Stock ewes from 8s. to 10s. Fat cattle from 7s. to 8s. per stone, sinking the offal. Lean cattle, from the scarcity of fodder, not much in demand. Half-fed beasts, for laying on turnip, sell well; but no sale for horses, unless they are very good.

October 2.

Haddington, October 10.

THE weather, for a month past, has been variable, and harvest-work has gone on very unpleasantly. Except a few fields, the corn

is all cut down; though, on several farms, a considerable quantity remains in the stock. Shearers were very scarce during the throng of harvest, which occasioned wages to rise to 2s. 6d. per day, besides maintenance.

Gifford Autumn fair, on Tuesday, was well supplied with cattle, generally in good order. A number of purchases were made, though a considerable quantity were driven home unsold. Prices may be rated at from 7s. to 8s. per stone, sinking the offal. The shew of horses, was indeed indifferent, and few sheep were sold.

At our market this day, the prices were as follows:—Wheat, which, in general, is of excellent quality, but damp from the wetness of the weather, from 35s. to 54s.; barley, from 34s. to 41s.; and oats, which, upon the whole, are only tolerable, from 26s. to 34s.—all per Linlithgow boll.

At a meeting of heritors of the parish of Preston, in this county, September 2d, a report, from the committee appointed last Winter, to conduct the sale of meal to the poor at reduced rates, was laid before them. From the report it appeared, that 128 families had been regularly supplied with meal, at prices very little higher than those of ordinary seasons; and that coals had been furnished to the most necessitous poor, free of all expence, during the last inclement Winter: Also, that the sum of 738l. 8s. 4d. had been expended by the committee, in the purchase of grain, for which, after being manufactured into meal, 387l. 15s. 6½d. had been received. The heritors approved the said report, and directed that a piece of plate should be presented to one of the members of the Kirk-session, who had taken extraordinary trouble in conducting the business.

Mid-Lothian Quarterly Report, from July 1st, to September 30th, inclusive.

THE intense drought, remarked in the report for the preceding quarter, has continued, with little intermission, during almost the whole of this, there having been no showers, to any effect, till about the 5th of September, when rain, preceded by two or three days fog, set in, and continued for four or five days together, which did indeed some damage to such corns as were then cut in the fields; but, on the other hand, was highly beneficial to the pastures, and to the potato-crop, both of which had declined greatly; also to the aftermath of the hay, which, till then, was altogether at a stand. In the end of July, and beginning of August, the weather was uncommonly warm, which, conjoined with the existing drought, had the effect to bring on the harvest much sooner than was expected,

pected, and even before the ear, in many instances, was properly filled, particularly on all dry and gravelly soils, which, of course, from this premature ripening, have produced a shrunk grain and scanty return. This has been the case, more or less, with grain of every description, wheat alone excepted, which not only stood out the extreme dryness and heat of the season on every soil, but even prospered under it, producing now as fine a sample as has perhaps been known for many years. Straw, as well as hay, having been greatly stinted in the growth, fodder of all kinds is, of course, uncommonly scarce. Potatoes, which continued to prosper till about Lammas, then fell off much; so that if it had not been for the reviving rains in the beginning of September, they would not have turned out above one fourth of an ordinary crop; and, even after all, will hardly amount to one-third. Turnip has also failed greatly. On the whole, the present crop does not appear, by any means, to be such as will make up for the very great deficiency in the crop of the year 1799.

The harvest, which commenced early in August, is now nearly finished. Reapers have been had in great abundance, and, of course, at moderate wages. Preparations for the next crop are going on with alacrity; and what wheat has already been sown, whether on fallow or from stubble land, has been accomplished under very favourable circumstances.

Prices have continued high, (oat-meal excepted, which, being now at 2s. the peck, is more in proportion to the rate of labour), and still have little appearance of declining, notwithstanding of the immense quantity of grain imported into the different harbours of the kingdom. The true reason of this (the wretched return of crop 1799, and the doubtful aspect of crop 1800), has been altogether overlooked, and the whole imputed to machinations of middle-men, forestallers, and regraters, those

Gorgons and Hydras, and Chimeras dire!

MILTON.

For, at no period has there been such an universal cry of plenty, in the mouths of the newsmongers and public declaimers, as in the present, (except perhaps in the year 1782, of starvation memory), accompanied with grievous imprecations, warm from the heart, against corn-factors and all dealers in grain, with many a side-glance curse also at farmers and meal-men. These people, like to the false prophets of old, continually call out, Peace! peace! (in the present instance, a *piece* of bread), while there is no peace. But perhaps, after all, this may arise from their own inward conviction; like to the man who fabricated a story about *sailing over the Alps*, and told it so often, that at length he believed it himself. On the other

other hand, the farmers, who are rather a grumbling kind of race, have been so long remarked for exaggerating every thing bad in the weather, or bad about the crop, that they are not now believed when they speak the truth.

Return of Grain of all kinds, flour, meal, hulled barley, &c. imported and exported at Leith, from the week ending July 12th, to the week ending October 11th, inclusive. The whole reduced to quarters of 8 bushels each, reckoning a ton of flour equal to 7 quarters of wheat; a ton of hulled barley equal to 8 quarters of barley; and 4 bolls of oat-meal equal to 3 quarters of oats.

Week ending	*Imported coastways.*	*Imported foreign.*	*Exported coastways.*
July 12.	1822	1474	3221
19.	2228	1170	2616
26.	3697	4858	2436
Aug. 2.	2638	2476	3391
9.	11,270	4606	2770
16.	6873	1399	2121
23.	2643	4098	1801
30.	1827	7392	642
Sept. 6.	3839	1297	717
13.	109	4188	566
20.	494	1299	807
27.	480	157	1353
Oct. 4.	120	105	1757
11.	603	none	2009
This quarter,	38,643	34,519	26,207
Former quarter	60,550	37,219	26,699
Coastways	99,193	71,738	52,906
Foreign	71,738		
Total	170,931		
Deduct exported	52,906		

Remains 118,025 for home consumpt, which is supposed to have been 3000 quarters weekly in Edinburgh, Leith, adjacent suburbs, and inland counties to the south and west. Hence in 33 weeks, (the time specified), there will have been expended 99,000 quarters, leaving still 19,025 quarters for the Winter consumpt, in addition to the existing crop in the country.

Wheat

Wheat ſold in Haddington market, from October 1. 1799 to October 1. 1800—16,441 bolls. Oat-meal in Edinburgh market, in the ſame period—Lothian 10,149, South Country 125; in all 10,274 bolls.

Fife Quarterly Report.

During July, Auguſt, and the beginning of September, almoſt no rain fell. Dry weather, for ſo long a period, is not remembered by any perſon. The hay, in conſequence, is leſs than half a crop; the after-growth, nothing: for it, as well as the paſtures, were entirely burnt up, brown and withered, and nothing green and luxuriant, except natural meadow, and inferior wet paſtures; for ſuch, the ſeaſon was a good one.

The oats, in general, are a thin crop; partly owing, it is ſuppoſed, to the ſeed being injured, and a wet ſeed-time. They are well filled and ripened, but almoſt no ſtraw, owing to the extreme drought.

Barley, a better crop in general, grain plump and good: but as much of it was arreſted in the ſhoot-blade for want of rain, the ſtraw is ſhort, and the ſtalks of a much ſmaller ſize than the farmers expected from the appearance before cutting.

Wheat, a thin crop, good grain, but little ſtraw.

Beans, a poor crop in general.

Peas, a better crop, extremely well filled, but the ſtraw ſhort.

Flax, a good crop, where the ſoil was properly choſen for that plant. The flax-ſeed ſaved, the beſt in quality ſeen for many years: the dry ſeaſon being particularly favourable, much more ſeed is ſaved than uſual in this county.

Potatoes, entirely ſtinted in their growth for want of rain; the plants dwarfiſh, and did not cover the ground; and, conſequently, an unproductive crop, ripened prematurely. Perhaps owing to this, a phænomenon in that crop has been obſerved this Summer, viz. the few potatoes at the root puſhing out ſtems at the eyes, in the ſame way as ſets planted in Spring; and new potatoes, of the ſize of peas, forming on theſe ſtems in great numbers, drawing their nouriſhment from thoſe firſt formed, and probably injuring them materially. When rain at laſt fell in ſufficient quantity to reſtore verdure to the paſtures, (middle of September), the potatoes began to grow with vigour; the roots increaſed in ſize to a great degree, and the ſhoots from the eyes are not obſerved in ſuch numbers; at leaſt, no new ones appear. Upon the whole, however, the potatoes cannot be reckoned at above half a crop.

7th October.—The harveſt not finiſhed, and rain almoſt every day, ſucceeded by drying winds; ſo that little injury to the crop has yet happened. Harveſt began to be general about 1ſt September; and two thirds of the crop is now well got in; though on ſome farms part of it is not yet fully ripe.

A famine for cattle is dreaded, from the ſcarcity of ſtraw. The price of corn in the ſtraw exorbitant. But it is ſuppoſed, if the weather is tolerable, the ſame calamity to man is not likely to happen.

Turnips, owing to a total want of rain, are a very poor crop, not even equal to half a crop in ſome ſeaſons; which adds to the difficulty of maintaining Winter ſtock.

The graziers complain of heavy loſſes from the failure of the paſture graſs. Many have loſt not leſs than the whole rent.

Fat ſtock ſells well; but, wherewith can the farmer fatten, when turnips, potatoes, hay, and ſtraw, have all failed him?

Hay 1s. 6d. per ſtone, and can only with difficulty be got.

Prices of Victual.

In this county, very little, except foreign victual, was to be found all this quarter. No oats, no barley, no peas. Old wheat, a ſmall quantity in Auguſt, price 40s. to 55s. per boll.

Oat-meal in July, from imported corn, 52s. per boll.

End of Auguſt, fell to 34s and continues at ditto.

Barley-meal, in July, 34s. per boll.

Ditto, end of Auguſt, 23s. 4d. per ditto, and continues the ſame.

No old peas-meal at any price.

New Crop.

Wheat, on 1ſt October, from 40s. to 50s. per boll.

Barley, fine quality, at 35s. per ditto.

No new oats as yet.

A little new oat-meal, at 34s. per boll.

Extract of a Letter from a Farmer in the Upper Ward of Lanarkſhire, Oct. 6.

Our crops here are moſtly got into the ſtack-yard, and they promiſe to yield well. Oats, when mealed, produce nearly meal for corn, and barley 24 or 25 pecks per boll. In the muir-lands, they were laſt week little more than begun to cut, and their crops are thin upon the ground, much bad ſeed having been ſown. There is but a ſmall extent of wheat and peas ſown in this diſtrict; but

but what we have of theſe grains are tolerably good. A larger ſpace than common was planted this ſeaſon with potatoes: the quality of the produce is good, but the quantity will hardly average one half of what we uſed to have in favourable years.

The late rains have done great ſervice to the paſture-graſs and turnips. A conſiderable extent of this valuable root is now ſown here, which we find to be of great advantage for cleaning our lands, independent of the profit ariſing from the crop, eſpecially in a ſeaſon like the preſent, when fodder is ſo ſcarce.

Little ſale for lean cattle; but real fat bring good prices. At Lanark, beef is from 4d. to 6d. per lib.; butter 1s. 3d. to 1s. 4d.; common cheeſe 5d. and 5½d.; oats, with fodder, ſell from 35s. to 40s. per boll; without fodder, 28s. to 32s.; bear 31s. 6d.; hay 1s. 3d. per ſtone; and ſtraw 6d.

Extract of a Letter from Caithneſs, Oct. 4.

We had dry warm weather till the 26th ult.; ſince which it has rained every day. The harveſt was then well advanced; and I do not think the crop has as yet ſuſtained any damage. The crop is light, particularly upon the coaſt-ſide; in the Highland diſtrict it is much better, but very little ſtraw indeed. Bear ſells from 28s. to 30s. per boll; oat-meal from 35s. to 40s. per boll of 8½ ſtone Dutch; bear-meal from 25s. to 30s. per boll of 9 ſtone Dutch; oats from 28s. to 34s.; hay 10d. and 11d. per ſtone; beef and mutton 3d. and 4d. per lib. The market for lean cattle is low; average price 50s. per head. Turnip-crop is indifferent. Potatoes good in quality, but ſcarce.

ENGLAND.

Extract of a Letter from Louth, Lincolnſhire, Sept. 16.

In this neighbourhood, the harveſt is at its height; the greateſt part of the corn is brought home; and, from the information of ſeveral reſpectable farmers, I am happy to learn, that it is in excellent condition. The ſprouted ears are not numerous. The crop is light, compared with that of ſome former ſeaſons.

The rot is appearing among the ſheep, owing to the great flush of graſs ſince the late rains. In conſequence, the graziers, who have not land to change their paſture, are ſelling off as faſt

as they can; which muſt render mutton plentiful and cheap for ſome time.

Beaſts for ſlaughter ſell from 6s. to 7s. per ſtone of 14 lib. ſinking the offal; wool, 23s. to 25s. per tod of 28½ lib.; retail price of beef, 5d. to 7d.; mutton, 6d.; veal 6½d.; butter, 14d. per lib. of 18 ounces; potatoes 8d. per peck; milk, 2d. per quart.

There has been ſome rioting at Tatterſal and other villages near Boſton; but, on the Volunteers being ordered out, the rioters diſperſed. The preſent condition of the poor is certainly very diſtreſſing; yet rioting is not the way to procure relief.

Extract of a Letter from a Yorkſhire Farmer, Sept. 6.

Of our turnips, on indifferent land, very few have hit; upon fine ſandy ſoils, they now promiſe to be tolerable. Potatoes are much freſhened of late, and I hope will turn out better than expected. Oats are pretty good in general; barley the ſame, though much ſprouted, in conſequence of the heavy rains. The ground was warm, and ſome people truſted it in the ſwath till it was grown moſt ſhockingly. Part of mine is ſo damaged as to be fit only for hogs. Wheat is alſo pretty good. Some of it, indeed, is ſprouted; and if the preſent hazy weather continues much longer, the loſs will be great. Upon the whole, I truſt that our crop will turn out a tolerable one.

Butcher-meat keeps at 6d. and 6½d. per lib.; and my opinion is, that fat will preſerve its price; for, though the graſs was burnt up, our markets were never overſtocked; and, during the time I have been engaged in buſineſs, they uſed always to flag in a hot and dry Summer.

Extract of a Letter from Hull, Sept. 10.

The corn crops, which were much improved by the dry warm weather, have been damaged by the rains that lately ſet in, and ſtill continue; which make us fear that the quantity of ſprouted grain will be equal to that of laſt year; but the quality being vaſtly ſuperior, the loſs will be more eaſily ſuſtained. The white crops are in general ſmall; a great part is yet ſtanding, and little got in. At our market yeſterday, prices advanced, there being many more buyers than ſellers. Sales for wheat were—Peterſburgh 90s.; Riga 95s. 6d.; Hamburgh, Bremen, &c. 95s. to 105s.; inferior ſorts 80s. to 85s.; ſome as low as 63s.; new wheat, but very ſoft, 80s.; oats,

oats, Ruſſia, 31s. 6d.; Hamburgh, 36s.—all per quarter of 8 Winchester buſhels.

Prices of other Articles here.

Flour, common, 3s. 7d.; middle, 3s. 10d.; fine, 4s. 3d. per ſtone; rape-ſeed, 50l. per laſt; rape-cakes, 7l. per ton; lintſeed cakes, 12l. 12s. per ton; hay, 6l. to 6l. 10s. per ton; ſtraw, 2l. 5s. to 2l. 10s. per ditto; whins or furze, 7s. to 10s. per 120 kids or bundles; wool, 23s. to 24s. per tod; butcher-meat, retailed at 6d. upon an average; beef, wholeſale for ſhipping, 46s. to 50s. per 112 lb.

Imported into this place, from the 28th July to September 1ſt, from foreign ports, as per Cuſtomhouſe liſt,—25,482 quarters of wheat, 8,984 quarters of oats, 1741 quarters of rye, 499 quarters of barley, 186 quarters of peaſe, 976 quarters of beans, and 20 cwt. of flour.

Graſs-lands, which were nearly burnt up by the drought, are now in a flouriſhing ſtate.

Lancaſhire Quarterly Report.

In this diſtrict, the harveſt is chiefly finiſhed, and the crop brought home, in excellent condition. According to expectation, the grain turns out well in regard to quality, (particularly wheat), though, in general, it was obſerved rather thin upon the ground. The markets at Liverpool, and in the neighbourhood, ſtill keep high, though the importations of wheat, flour, &c. at the port of Liverpool lately, have almoſt, if not altogether, exceeded that of any former period. New wheat has hitherto ſold as high as from 13s. 6d. to 14s. and upwards, per meaſure of 70 lb. To-day the market was dull, and very few ſamples of wheat ſhown. New oats have been ſold from 5s. to 7s. 4d. per buſhel of 36 quarts. Oat-meal, from 3l. 10s. to 4l. per load, in this neighbourhood; but I am informed, that, in ſeveral of the market-towns in this county, it is, or has been lately, 3l. per load (and under) of 240 lb. Little of the barley of laſt crop, I believe, has yet been ſold, and that chiefly for grinding. I have heard of 7s. 6d., 8s., and 9s. having been given. The price at preſent, however, does not appear to be ſettled either by the brewers or other dealers. It is much to be lamented, that potatoes have been, and continue to be, extravagantly dear. The regular price has been from 6s. to 8s. per buſhel of 90 lbs. To-day, in the Liverpool market, the price fluctuated between 4s. and 5s. 4d. per buſhel. (It is to be obſerved, that the potatoes here, as in moſt other places, are ſorted, the large being ſeparated from the ſmall ones; and it was

the ſmall potatoes that ſold for the loweſt of the above-mentioned prices). This high price, ſome aſſert, is owing to the failure of the potato-crop in general; whilſt others aſſert, (and apparently with good reaſon), that though the crop may fall ſhort of what may be called a *good* crop, yet, from the large quantities planted, there does not appear to be any neceſſity for the preſent very advanced price. However that may be, the late rains will certainly be very beneficial to the potato-crops, and cauſe the roots to ſwell very much in ſize, as is already very apparent. Though the old paſtures and after-graſs have improved ſo very much ſince the late rains, butter ſells here from 18d. to 20d. per lb. (beſt ſalt butter at 14d.). Hay ſells from 1s. to 1s. 4d. per ſtone of 20 lb. and ſome as high as 18d. per ſtone, but that is chiefly ſome of the very beſt of the laſt year's crop. Turnips, except where ſown very early, have failed in general. The crop of hay, in general, was good, and the quality ſuperior; but, owing to the great ſucculence in the graſs, and the gloominеſs of the atmoſphere, and not being ſuffered to remain till it was thoroughly cured, many ſtacks in conſequence heated; nay, ſome abſolutely fired, and that in greater numbers than ever before remembered.

Sept. 20. 1800.

Lincolnſhire Quarterly Report.

The wheat-crops have, in general, as formerly predicted, turned out light; and ſome, that were then promiſing, have ſuffered much from mildew, which was prevalent in Auguſt. Many fields have alſo received damage from the late wet weather. Barley, notwithſtanding the ſevere drought, will be a productive crop, though, in ſeveral inſtances, where early cut, it has ſprouted; as the warmneſs of the ground, when the rains fell about the 22d Auguſt, produced as ſpeedy an effect as if it had been on the floor of a malt-barn. Some that has been already thraſhed, makes ſuperior bread to the moſt of laſt year's wheat; which, it is hoped, will compenſate for the deficiency of wheat this ſeaſon. Barley-bread is much uſed in Lincolnſhire; and the peaſant, fed upon this aliment, looks equally healthy, and will do as much work as his neighbours who eat their wheaten bread.

Oats likewiſe prove a good crop; and, when generally thraſhed, muſt get lower in price. Beans and peas do not promiſe to be productive. Turnips are, for the moſt part, ſuperior to the crops of ordinary years; though, in a few inſtances, they have failed.

The hay-harveſt was never known to be better; and, though the crop of artificial graſſes was not heavy, yet the goodneſs of the natural graſſes will, in all probability, make up for the deficiency,

deficiency. The clover and trefoil, ſown with the barleys this year, have an excellent appearance.

Fat beaſts are now beginning to be plentiful: and as the paſtures and eddiſhes are very luxuriant, they have met with a conſiderable reduction in price. Of mutton, the markets have had an ample ſupply. Great apprehenſions are entertained of that fatal malady the *rot*, which has begun to make its ravages among the flocks in the lower parts of the county, and heavy loſſes are dreaded.

Wool has not brought ſuch high prices as expected. Prices are various, according to the qualities. The average of long combing wool may be about 23s. per tod of 28 lib. As the harveſt has, for ſome time, nearly occupied the whole attention of our farmers, little can be ſaid reſpecting the prices of grain; but, as near as can be aſcertained, wheat has ſold from 93s. to 100s.; barley, 63s. to 70s.; oats, 35s. to 45s.; beans, 84s.; all per quarter of 8 Winchester buſhels.——*Sept.* 27.

Norfolk Quarterly Report.

The ſoil of this county is ſo various, and of courſe ſo differently operated upon by every kind of weather, that no *general* deſcription can with juſtice be given of our rural matters. From this difference of ſoil, the harveſt has been a week and ten days ſooner in one place than another, by which ſome have ſuffered little by the long continued rains, while others have ſuſtained very great and material injury. The long continuation of hot and dry weather which preceded this, had ſo heated the ground, and the warmth of the atmoſphere was ſo great during the rains, that it was impoſſible to prevent thoſe grains, at that time cut, from ſprouting; nay, even many inſtances occurred, both in wheat and barley, of its growing as it ſtood. The harveſt is ended, except in the fen-lands, where, I underſtand, they have ſtill a week's work to complete it. The markets are now beginning to receive a regular ſupply. The peas and oats, on the high lands, were in general ſaved before the rains, and are of a very fine quality, as to colour and weight. Such peas, if white, ſell as high as 70s. to 80s.; if grey, 48s. to 50s. per quarter. The wheat-crop being injured in many places by the mildew, and alſo much ſprouted and damp, the quality is extremely various; the market-price of the beſt, whoſe quality is extremely fine, reaching 11cs. per quarter; whilſt there are of all gradations down to 60s., and ſome for which no price is offered. The barley-crop, with ſome exceptions as to ſoil, muſt be eſteemed abundant, but the quality extremely various,

except thoſe which were harveſted before the rains. Very few, even of the drieſt and beſt coloured, are free from a ſprouted kernel, and ſome have even one half of them grown; the prices, of courſe, muſt be extremely different. Thoſe of good body, and ſaved without rain, are of the fineſt quality I have ſeen for many years, and were eagerly ſought after by ſome neceſſitous maltſters, even at 80 s. per quarter: that ſpirit is however ſomewhat damped, and ſuch now only obtain 70s. to 72s.—The ſecond quality, which is dry and well ſaved, excepting here and there a ſingle ſprouted corn, and of which the malting ſort muſt moſtly conſiſt, obtains from 46s. to 54s., with all gradations downwards, even to 24s. per quarter. The turnip-crop, excepting *particular ſoils* and *late ſowings*, ſtood the long drought beyond all expectation; and, ſince the rains have come, have experienced a growth and improvement never remembered in ſo ſhort a ſpace of time. This crop may be reckoned very fine. The eddiſhes and graſſes are moſt abundant; but hay, in conſequence of many ſhips loading the ſame for the northern counties, is advanced conſiderably, being now ſold at 4s. 6d. per cwt., and 5s. demanded. Beef and mutton is tolerably plentiful; the former 6s. 6d. to 7s. per 14 lib., and the latter 5½d. to 6d. per lib. You may form your own calculations as to what the grazier obtains, as they generally get 6d. to 9d. per ſtone more on beef, and ½d. to ¼d. per lib. more on mutton, according to the ſeaſon, to ſink the offal. At our principal lamb-fair, 4th September, that article went off very ſlow; but wether-lambs obtained 16s. to 19s. per head The South-down and half-bred went off more ready. Of wool, I underſtand Norfolk has obtained 46s. to 48s.; South-down, 50s. to 52s. 6d.; Long Lincoln, 23s. to 25s. per tod of 28 lib.; but much is unſold. The preparation for wheat-ſowing is going buſily forward, and the ſeaſon is favourable.

Extract of a Letter from Lynn, October 1.

At the commencement of the harveſt, (ſay from the beginning of Auguſt till the 19th of the ſame month), we had remarkably fine weather; and nearly the whole of the rye, peas, and high-land oats, with about one fourth of the wheat, and one fifth of the barley, were ſecured in excellent condition, and are of beautiful quality. Since then, the corn has been harveſted in various conditions, and equally various in quality, particularly the two laſt articles, which are much grown; for, owing to the heat of the earth when the rain came, that which was cut vegetated quicker than ever was known.

The crop of wheat was generally thought, before the rains, a very

very good one; for though it was thin on the ground, the ears were well filled; but ſince then, the greater part has been ſo affected by the weather, that we fear it will be found deficient, as very few ſamples appear that were harveſted ſince, without being in part ſprouted.

The crop of rye is but ſmall; but as it is all harveſted under a good ſun, the quality is very dry, and will yield well.

Barley, no doubt, is a very abundant crop; but there is a great deal of it ſo much grown, that it will be totally unfit for malting. That, early harveſted, is beautiful; and as we have had latterly ſome pretty fine weather, that which was not cut during the firſt rains, and was not fully ripe, is not much hurt: But in all the ſamples harveſted ſince the rain, there will be ſome ſprouted kernels, as it chitted whilſt ſtanding; but we think, on the whole, that which we call our ſecond quality, will be found as kind in malting as the very fine delicate ſort.

The oats are good. The crop alſo in the fens is equally good, in point of quality; but as they are much later in the harveſt, there will be a great variety in the ſamples; yet, upon the whole, they will be found much ſuperior to the growth of laſt year.

Peas are a fair crop, and being well harveſted, of a fine quality. Beans are middling; but as they have been expoſed to the whole of the rains, and ſome even yet abroad, we conſider them injured, and in a precarious ſtate.

Current Prices of yeſterday's Market, as paid to the Growers.

	Per Quarter.		*Per Quarter.*
Wheat, fine -	100 to 110	Barley, coarſe -	24 to 28
Ditto, runs -	80 — 90	Oats, fine -	36 — 40
Ditto, coarſe -	65 — 70	Ditto, coarſe, -	26 — 30
Rye - -	40 — 46	White peas -	76 — 78
Barley, fine -	72 — 74	Grey ditto -	52 — 54
Ditto, ſeconds -	48 — 52	Beans—none appear.	

Rape-ſeed, 48l. to 51l. per laſt.

Northumberland Quarterly Report.

The corn-crops in this diſtrict have been materially injured from ſeveral cauſes. The grub, in the Spring months, in a great meaſure, deſtroyed the wheat and oats upon clover leas, where the ſoils were ſtrong or moiſt. Upon dry, ſandy, or gravelly ſoils, the extreme drought checked the growth of barley and oats ſo very much, that, in many places, the ear did not get half out of the ſhot.

ſhot-blade, and the ſtraw was ſcarcely a foot high. Upon the real good mellow loams, the crops were remarkably fine, and nearly all the early oats cut, when the firſt rains began on the 23d Auguſt, by which the whole of the ſheaves were ſo completely wet to the heart, that it was neceſſary to open them out, to get dried again; and juſt when they were a ſecond time fit for leading, the wet weather ſet in on the 4th September, and continued, without intermiſſion, till the 10th, by which they were again completely drenched, and a great deal in a growing ſtate, in ſome places ſprouted quite green, and ſo diſcoloured, as renders them totally unfit for the London market. But this was not the worſt: they were again obliged to be opened, and laid in broad bands; and, being ſo tendered with the wet, the grain hulled out in ſuch quantities, that the loſs is ſcarcely to be eſtimated, beſides the ſtraw being ſo materially deteriorated for Winter fodder. But the evil did not reſt with the crops that were cut, and in ſheaves or ſtooks. The *ripe crops* of wheat and barley that were *uncut*, and *ſtanding perfectly upright*, were, in many places, ſprouted to ſuch a length, and in ſuch abundance, that probably the oldeſt farmer never ſaw another ſuch inſtance, nor ſo great a loſs afterwards, in ſhearing the wheat, by the grain hulling out, from its being ſo tendered by wet weather. Upon the whole, I am ſorry to add, that the crop of white corn is conſiderably below an average.

Peas and beans are a very abundant crop. Few people ever ſaw them ſo well loaden, or ſo perfectly ripened.

Turnips were beginning to change colour the two middle weeks in Auguſt, and the moſt unpleaſant apprehenſions were entertained for their ſafety; but the rain came exactly in time, and reſtored them to health; and ſuch a vigorous and rapid growth enſued, that they have the moſt promiſing appearance of being a very abundant crop. Had not this been the caſe, the ſituation for Winter food would have been truly alarming, as our crops of hay and ſtraw are not much above half their uſual bulk.

Potatoes, I am afraid, have alſo been injured by the drought, upon ſandy and gravelly ſoils, on which, it is ſaid, they are not ſo productive as expected.

The demand for caſt ewes and ſhearling wedders, has been very briſk; the prices better than laſt year, by about two ſhillings a-head. The cattle were alſo well ſold at St Ninian's fair, (the 27th September), to drive ſouthward.

The preſent prices of corn are—

Wheat,	10s.	to 12s.	per	Wincheſter buſhel.
Barley,	6s.	to 7s.	per	ditto.
Oats,	4s. 6d.	to 5s.	per	ditto.
Peas,	8s.	to 10s.	per	ditto.

The

The harveſt has been long and tedious: it began the 1ſt of Auguſt, and is yet unfiniſhed.——*October* 4.

Extract of a Letter from a Farmer in Wales, September 30th.

"We had a remarkably dry Summer; ſcarcely a ſhower from the middle of May till the 19th of this month, ſince which it has rained and blowed by turns. The graſs was entirely burnt up; and ſome farmers on the clay lands had to fodder their cattle with hay, before the corn-harveſt commenced. Hay is, in general, a fair crop, but much of it was carried too ſoon: where it got time to win, the quality is excellent. Our corn-harveſt commenced about the 8th of Auguſt, and was nearly over in three weeks. It came on all at once, except ſome late barleys, which are not worth reckoning. Wheat improved every day till harveſt, and will be a ſaving crop, which is more than we expected from previous appearances. Oats are very ſhort, but well corned; ſmall in the grain, which does not fill the meaſure well. Barley does not exceed half a crop: on the beſt land it was thin, and, on the clays, it will ſcarce pay for the gathering. The few peas ſown here are good. Potatoes very bad. Few turnips, moſt of them being ploughed down, and the land prepared for wheat. Corn-markets fluctuate much. Immediately after the harveſt, wheat dropped from 55s. to 26s. per buſhel of 20 gallons: it has again roſe to 33s. and 34s. Barley from 18s. to 20s., and oats 16s. and 17s.; but our buſhel for that grain is nearly equal to four Wincheſter ones. Seed-tares, 30s. No peas or beans at market. Butter, 1s. 3d. per lib. of 16 ounces. Cheeſe of ſheeps milk, 9½d. and 10d.; of cows milk, 9d.; of ſkim milk, 6½d. Beef, from 5d. to 6d.; mutton, from 4½d. to 6½d.; veal, 5d.; pork, 5½d. Hay, from 4l. to 6l. per ton; and ſtraw dearer in proportion.

If we could believe the newſpapers, the crop in Britain is, this ſeaſon, very great: but, when I read of the vaſt crops of corn and potatoes in Glamorganſhire, I can give but little credit to what is ſaid concerning other counties. It is owing to ſuch miſrepreſentations, that we had ſo much rioting in this quarter. Laſt week, the forge-men occaſioned much diſturbance; but, thank God, they are now quiet, and the gaol full of them."

Extract of a Letter from Stafford, October 5th.

"In conſequence of the late commotions here, and in other places of the county, the Mayor requeſted the principal farmers to attend him

him at the Town-hall on the 26th ult. to ſettle the price of wheat; when all preſent agreed to ſell at 12s. per buſhel of 38 quarts, though many have ſold lower, which, I fear, will not be followed up. Our crops have greatly failed for want of rain: before harveſt, we had not more than one day's rain for two months: therefore the bulk is ſmall indeed. I have only threſhed a few buſhels of wheat, for my houſe-conſumption; but the grain, though good, is lighter than ordinary. My barley weighs 60 lib. and oats 48 lib. per cuſtomary buſhel of 38 quarts. As yet I have only ſold 188 buſhels of the former, for which I got 9s.; but yeſterday, owing to a great demand, it got up to 9s. 6d. and 10s.; oats, 6s. 6d. to 7s.—Laſt Thurſday was our great fair. Beaſts of every kind ſold high.

I will give you an inſtance of our oppreſſion from tithes, the major part of which, in this county, ſince the days of Henry VIII. are in lay hands. Laſt year I paid 34l. in lieu of them. This year I was ſuffered to carry, before they fixed the price; (good weather ought never to be paſſed); and though I have ten acres of leſs corn than laſt year, yet they have charged me 52l. to be paid on 26th January. I wiſh you to read my friend Mr Boulton's letter in the Stafford paper, with attention. Three great Lords have put a negative upon the incloſure of Needwood foreſt, thinking that beneficial meaſure would interfere with *their favourite purſuit of running after a ſtinking fox.* From ſuch friends to their country, good Lord deliver me!

I once deſpaired of my turnips; but the fine rains, ſince harveſt, have brought them forward beyond all expectation, particularly the Swediſh ones, which promiſe to be an abundant crop. Beef and mutton was yeſterday from 5½d. to 6d. per lb.

Extract of a Letter from Rippon, (Yorkſhire), October 9.

In hopes of being enabled to inform you, that our crops were ſafely harveſted, and prices reduced, I have delayed writing you till this time; but am ſorry to ſay, that the heavy and continued rains have injured our grain very much, and that there is little of it free from ſprouts. The prices are rather lower, but by no means ſo much reduced as expected; and I fear they will continue higher than the poor and middle claſs of people can poſſibly pay.

A large quantity of potatoes were planted laſt ſeaſon, but they are ſaid to be unproductive. The rains at preſent are great, which will prevent the fallows, intended for wheat, from being ſown in due time.

Prices

Prices of Grain, &c. at our Market this day.

Wheat 10s. to 14s.; maſlin 10s. to 13s.; beans 10s. 6d.; barley 6s. 3d. to 6s. 9d.; oats 4s. to 5s. 3d.; potatoes 3s. to 4s. 4d.; all per Wincheſter buſhel. Butter 60s. to 63s. per firkin of 56 lib.; beef 5d. and 6d.; mutton 6½d.; lamb 6d.; veal 7½d.; freſh butter 17d. per lb. of 21 ounces.

Extract of a Letter from London, October 10.

The crops of grain in the vicinity of this city, are in general very middling. Wheat on the ſtrong clays of Middleſex is very light, and will not average above 12 buſhels per acre. Beans are good, but the produce not yet ſufficiently aſcertained. In Hertfordſhire, the wheats are fine in quality, and the produce great. Barley is alſo a good crop; from ſix to eight quarters per acre being produced in ſeveral places. In Eſſex and Surry, a conſiderable part of the crop was out when the rain ſet in; and much of the wheat is ſprouted, even of what was then uncut. The white wheats were moſt affected; the red being in few inſtances hurt, except where it was lying upon the ground.

We have hitherto received but a ſhort ſupply of new grain, and prices have been advancing ever ſince the middle of Auguſt. Fine Engliſh wheat ſells at 120s. and 126s.; barley 70s. to 76s.; oats 45s. to 46s.; beans 50s. to 56s.; old ditto 63s.; hog peas 54s.; boiling ditto 96s.; ſplit ditto 120s. to 126s.; all per quarter of eight Wincheſter buſhels.

The average weight of wheat is about 59 lib. per buſhel; barley 50 lib.; oats 40 lib.; beans 56 lib. The millers ſay, the wheats do not yield ſo much flour, by 28 lib. in the quarter, as in former ſeaſons. Probably this may be owing to the great part of what has as yet appeared in Marklane being of inferior quality; as farmers naturally bring out at firſt that which is moſt likely to loſe by keeping. The new oats are ſuperior to any ſeen here for a long time; but we have hitherto had a ſcanty ſupply; and good old ones are difficult to be got. We have had no arrivals from abroad, of conſequence, for a month paſt.

Smithfield market has been lately well ſupplied. Potatoes are conſidered as a middling crop, prices from 7s. to 12s. per ewt.; hay 6l. to 6l. 15s.; clover ditto at 7l. per load; ſtraw about 1s. 3d. per truſs.

POSTSCRIPT

POSTSCRIPT TO SCOTS INTELLIGENCE.

Extract of a Letter from Haddington, Oct. 17.

The demand for wheat was briſker than for ſome days paſt, and the average price advanced conſiderably. Very little old wheat remains on hand; and what is preſented, is of miſerable quality.

Barley was rather dull; but oats ſold fully better than at laſt market. Peas and beans likewiſe advanced. Our ſupply of oats and peas has been ſcanty for ſome time paſt.

Since Tueſday, the weather has been very fine and dry, which has allowed the remainder of the crop to be brought in in ſafety to the ſtack-yard. A good deal of wheat has been ſown this week; and if the favourable weather continues eight days longer, the greateſt part of the wheat ſeed in this county will be got finiſhed.

As an inſtance of the attention now paid to ſtock in this county, one of our moſt reſpectable farmers lately purchaſed a lot of breeding ewes, at a ſale in Berwickſhire, at five guineas per head; which, we hope, will be the means of exciting a more general attention to that mode of huſbandry, than hitherto has been cuſtomary in this diſtrict.

TO THE CONDUCTORS OF THE FARMER'S MAGAZINE.

Gentlemen,

If you have a ſpare corner in the Magazine, pleaſe give a place to the annexed extract of a letter, lately received from an eminent foreign political writer, who made a tour through Scotland laſt Summer; and oblige yours, &c.

A Friend to the Magazine.

"One of our firſt cares, after arriving in Edinburgh, was to provide ourſelves with the two firſt numbers of the Farmer's Magazine. We have already peruſed them; and all I have to tell you about it is, that we unanimouſly range ſuch publications amongſt the principal cauſes of the active ſpirit of improvement that pervades this iſland, and particularly this part of North Britain. We all agree upon the general ſuperiority of the Britiſh Agriculture, over that of the Continent; but it is not ſo eaſy to agree upon the cauſes; for they are ſo numerous and complicated, that they might well furniſh matter for a very comprehenſive work."

OBI-

OBITUARY.

At Longrigg, Berwickſhire, Joſhua Tait, Eſq; an eminent farmer and grazier.

At Wecton, Yorkſhire, Mr J. Craven, farmer, aged 88. He was married 11 years ago, to a young woman, aged 16, by whom he had three children, and who is at this time in a ſtate of pregnancy.

At Malton, Yorkſhire, Mr Witty, one of the firſt horſe-dealers in the north of England.

Mr Samuel Preck, farmer at Hardwick, Suffolk, aged 83.

At Goodleigh, Devonſhire, Mr Henry Stibbing, farmer. He was a great fox-hunter, and had collected as many foxes pads as covered his ſtable door and door-poſts, having been in at all their deaths; and, at his own particular deſire, a pad was placed in each of his hands when laid in the coffin.

At Filliefide, near Edinburgh, Mrs Ann Horn. Since her death, the farm of Filliefide, conſiſting of 160 acres of arable land, has been ſet by public roup, at the amazing rent of 1110l. Sterling per annum. We underſtand the old rent did not exceed 400l.

NOTES TO CORRESPONDENTS.

The Rural Inquirer, No. III. is unavoidably poſtponed.

The *plan of a leaſe and cultivation table, adapted to the weſt-country climate*, is received, and under conſideration.

Firſt part of a Tour through the Northern Counties of Scotland will appear in our next.

We offer thanks to our numerous Correſpondents, (particularly to thoſe who have taken the trouble to collect intelligence); and are extremely ſorry, that want of room prevents us from giving them all a place, notwithſtanding that *ſixteen additional pages* are given.

We will be obliged to any of our friends in Dumfries-ſhire or Galloway, who will report the ſtate of huſbandry in theſe diſtricts.

The Title-page and Index to this Volume, will be given with next Number.

No. V. will be publiſhed on Monday, 12th January 1801.

END OF THE FIRST VOLUME.

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